



✓ (2)

NAVAL POSTGRADUATE SCHOOL

Monterey, California



DTIC
S D
DEC 30 1991

THESIS

A COMPARATIVE ANALYSIS OF THE ARMY SPECIAL
OPERATIONS FORCES SUPPORT STRUCTURE TO THE
INFANTRY DIVISION (LIGHT) SUPPORT STRUCTURE

by

Robin James Stauffer

December 1990

Thesis Advisor:

Thomas P. Moore

Approved for public release; distribution is unlimited

91-19145


91 1227 017

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE

REPORT DOCUMENTATION PAGE				Form Approved OMB No 0704-0188	
1a REPORT SECURITY CLASSIFICATION UNCLASSIFIED			1b RESTRICTIVE MARKINGS		
2a SECURITY CLASSIFICATION AUTHORITY			3 DISTRIBUTION / AVAILABILITY OF REPORT Approved for public release; distribution is unlimited		
2b DECLASSIFICATION / DOWNGRADING SCHEDULE					
4 PERFORMING ORGANIZATION REPORT NUMBER(S)			5 MONITORING ORGANIZATION REPORT NUMBER(S)		
6a NAME OF PERFORMING ORGANIZATION Naval Postgraduate School		6b OFFICE SYMBOL (If applicable) Code 36	7a NAME OF MONITORING ORGANIZATION Naval Postgraduate School		
6c ADDRESS (City, State, and ZIP Code) Monterey, California 93943-5000			7b ADDRESS (City, State, and ZIP Code) Monterey, California 93943-5000		
8a NAME OF FUNDING / SPONSORING ORGANIZATION		8b OFFICE SYMBOL (If applicable)	9 PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER		
8c ADDRESS (City, State, and ZIP Code)			10 SOURCE OF FUNDING NUMBERS		
			PROGRAM ELEMENT NO	PROJECT NO	TASK NO
					WORK UNIT ACCESSION NO
11 TITLE (Include Security Classification) A COMPARATIVE ANALYSIS OF THE ARMY SPECIAL OPERATIONS FORCES SUPPORT STRUCTURE TO THE INFANTRY DIVISION (LIGHT) SUPPORT STRUCTURE					
12 PERSONAL AUTHOR(S) Stauffer, Robin J.					
13a TYPE OF REPORT Master's Thesis		13b TIME COVERED FROM _____ TO _____		14 DATE OF REPORT (Year, Month, Day) 1990, December	
15 PAGE COUNT 129					
16 SUPPLEMENTARY NOTATION The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.					
17 COSATI CODES			18 SUBJECT TERMS (Continue on reverse if necessary and identify by block number)		
FIELD	GROUP	SUB-GROUP	Army Special Operations Forces; ARSOF; Combat Services Support; CSS; Logistics; Special Operations Support Command; SOSCOM		
19 ABSTRACT (Continue on reverse if necessary and identify by block number) The problem examined in this thesis is whether the current structure for the command and control of combat service support for Army special operations forces (ARSOF) is adequate for all ARSOF support units. This thesis is focused on the internal sustainment of ARSOF during contingency operations. The objective of this thesis is to conduct a comparative analysis of three alternative ARSOF support command and control structures to the support structure for the infantry division (light) to determine if the current ARSOF support command and control structure can be improved. The three ARSOF alternatives are: 1) the current ARSOF support organization, 2) the proposal by the U.S. Army Special Warfare Center and School and the U.S. Army Infantry Center to create a special operations support unit and					
20 DISTRIBUTION / AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT <input type="checkbox"/> DTIC USERS			21 ABSTRACT SECURITY CLASSIFICATION Unclassified		
22a NAME OF RESPONSIBLE INDIVIDUAL Prof. Thomas P. Moore			22b TELEPHONE (Include Area Code) (408) 646-2642		22c OFFICE SYMBOL Code AS/Mr

#19 - ABSTRACT - (CONTINUED)

a ranger support battalion, and 3) the author's proposal to create a special operations support command (SOSCOM). The analysis is based on the following measures of effectiveness (MOEs) for an efficient planning support structure: 1) "tooth-to-tail" ratio, 2) the number of support planning nodes/channels, 3) the proximity of support planning nodes to each other, and 4) the number of organic and nonorganic support units.

The main conclusion of the research is that the SOSCOM proposal is the most comparable support structure to the infantry division (light) support structure, based on the defined MOEs. The major recommendation of this thesis is for the U.S. Army Special Warfare Center and School to initiate a collective feasibility study with the U.S. Army Logistics Center and the U.S. Army Infantry Center to determine the costs and benefits of creating a SOSCOM.

Approved for public release; distribution is unlimited

**A Comparative Analysis of the Army Special Operations
Forces Support Structure to the Infantry Division
(Light) Support Structure**

by

**Robin James Stauffer
Captain, United States Army
B.S., Naval Postgraduate School, 1990**

Submitted in partial fulfillment of the
requirements for the degree of

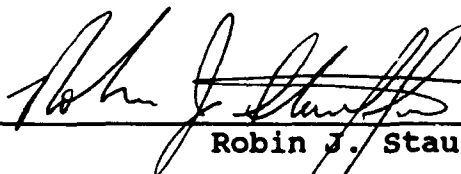
MASTER OF SCIENCE IN MANAGEMENT

from the

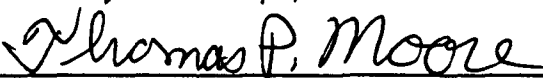
**NAVAL POSTGRADUATE SCHOOL
December 1990**

Accession For	
NTIS CRASH	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution	
Availability Codes	
Dist	Avail and/or Special
A-1	

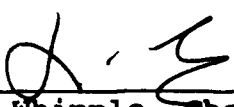
Author:


Robin J. Stauffer

Approved by:


Thomas P. Moore, Thesis Advisor


Mark Sturm, Second Reader


David R. Whipple, Chairman,
Department of Administrative Sciences

ABSTRACT

The problem examined in this thesis is whether the current structure for the command and control of combat service support for Army special operations forces (ARSOF) is adequate for all ARSOF support units. This thesis is focused at the internal sustainment of ARSOF during contingency operations.

The objective of this thesis is to conduct a comparative analysis of three alternative ARSOF support command and control structures to the support structure for the infantry division (light) to determine if the current ARSOF support command and control structure can be improved. The three ARSOF alternatives are: 1) the current ARSOF support organization, 2) the proposal by the U.S. Army Special Warfare Center and School and the U.S. Army Infantry Center to create a special operations support unit and a ranger support battalion, and 3) the author's proposal to create a special operations support command (SOSCOM). The analysis is based on the following measures of effectiveness (MOEs) for an efficient planning support structure: 1) "tooth-to-tail" ratio, 2) the number of support planning nodes/channels, 3) the proximity of support planning nodes to each other, and 4) the number of organic and nonorganic support units.

The main conclusion of the research is that the SOSCOM proposal is the most comparable support structure to the infantry division (light) support structure, based on the defined MOEs. The major recommendation of this thesis is for the U.S. Army Special Warfare Center and School to initiate a collective feasibility study with the U.S. Army Logistics Center and the U.S. Army Infantry Center to determine the costs and benefits of creating a SOSCOM.

TABLE OF CONTENTS

I.	INTRODUCTION -----	1
A.	BACKGROUND -----	1
1.	Baseline Force Structure -----	1
2.	The Problem -----	6
B.	OBJECTIVE -----	8
C.	SCOPE AND LIMITATIONS -----	9
D.	ORGANIZATION -----	10
II.	LITERATURE REVIEW AND METHODOLOGY -----	13
A.	METHODOLOGY -----	13
B.	LITERATURE REVIEW -----	15
III.	BACKGROUND -----	23
A.	HISTORICAL BACKGROUND -----	23
B.	LOW-INTENSITY CONFLICT VERSUS SPECIAL OPERATIONS -----	24
1.	The Low-Intensity Conflict Spectrum ----	25
2.	Special Operations -----	27
C.	SPECIAL OPERATIONS FORCES COMMAND STRUCTURE -----	28
1.	DoD Special Operations Command Structure -----	28
2.	Army Special Operations Forces Command Structure -----	30
IV.	THE LOGISTICS OF ARMY SPECIAL OPERATIONS FORCES -----	36
A.	ARSOF LOGISTICAL CAPABILITIES AND LIMITATIONS -----	36

1.	Special Forces Groups -----	36
2.	4th Psychological Operations Group -----	39
3.	96th Civil Affairs Battalion -----	40
4.	Rangers -----	41
B.	COMBAT SUPPORT AND COMBAT SERVICE SUPPORT OF ARSOF -----	43
1.	Theater Army Special Operations Support Command -----	44
2.	528th Special Operations Support Battalion -----	45
3.	Ranger Support Element -----	47
4.	112th Special Operations Communication Battalion -----	50
C.	THEATER ARMY SUPPORT OF ARSOF -----	51
1.	The Doctrine -----	51
V.	SUPPORT COMMAND AND CONTROL ALTERNATIVES -----	58
A.	JOINT READINESS TRAINING CENTER SCENARIO ---	59
1.	7th Infantry Division (Light) -----	61
2.	Army Special Operations Task Force -----	62
B.	SUPPORT COMMAND AND CONTROL ALTERNATIVES ---	63
1.	Alternative 1: Baseline Structure -----	64
2.	Alternative 2: SWS and USAIC Proposal -	68
3.	Alternative 3: SOSCOM Proposal -----	71
4.	Alternative 4: 7th ID(L) DISCOM -----	81
C.	SUMMARY -----	83
VI.	COMPARATIVE ANALYSIS -----	85
A.	MEASURES OF EFFECTIVENESS FOR A COMMAND AND CONTROL SUPPORT STRUCTURE -----	86

1.	Combat Force-to-Support Force Ratio ----	87
2.	Number of Support Planning Nodes/ Channels -----	87
3.	Proximity of Support Planning Nodes ----	88
4.	Number of Organic and Nonorganic Support Units -----	88
B.	COMPARATIVE ANALYSIS -----	89
1.	"Tooth-to-Tail" Ratio -----	89
2.	Number of Support Planning Nodes/ Channels -----	95
3.	Proximity of Support Planning Nodes ----	101
4.	Number of Organic and Nonorganic Support Units -----	107
5.	Summary of Analysis -----	110
VII.	SUMMARY, CONCLUSION AND RECOMMENDATION -----	112
A.	SUMMARY -----	112
B.	CONCLUSION -----	113
C.	RECOMMENDATION -----	115
1.	Creation of a Special Operations Support Command (SOSCOM) -----	115
	LIST OF REFERENCES -----	117
	INITIAL DISTRIBUTION LIST -----	119

I. INTRODUCTION

A. BACKGROUND

The research in this thesis focuses on the internal sustainment of Army special operations forces (ARSOF). Specifically, it will investigate the need to establish a special operations support command which would coordinate and manage continental United States (CONUS) and outside the continental United States (OCONUS) logistical support for both garrison based and deployed ARSOF units.

1. Baseline Force Structure

This thesis concentrates on five active duty components of the army special operations forces and the three active duty support organizations which are designated to coordinate for or provide support to ARSOF. Table 1-1 and Table 1-2 list the ARSOF units and the support organizations which are designated to provide ARSOF support. The tables show the baseline force structure for the thesis. Chapter IV of the thesis provides a detailed description of each ARSOF component and the three support organizations. Table 1-3 is a list of three possible task force configurations which ARSOF could operate under.

a. Army Special Operations Forces: Baseline Structure

Table 1-1 lists the five components of ARSOF which require support [Ref. 1:pp. 85-88]. Chapter IV describes each component in detail in terms of mission and organic support capabilities. The 75th Ranger Regiment is comprised of a regimental headquarters and three geographically dispersed ranger battalions. The U.S. Army Special Forces Command contains the special forces groups. The 96th civil affairs battalion (CAB), the 4th psychological operations group (POG), and the 112th special operations communications battalion (SOCB) round-out the ARSOF force structure analyzed in this thesis.

TABLE 1-1
ARSOF BASELINE STRUCTURE

UNIT	STRENGTH
75th Ranger Regiment	2700
Special Forces Groups	7000 (1400 X 5)
Psychological Operations Group	1100
Civil Affairs Battalion	600
Special Operations Communications Battalion	200
Total Force	11600

Table 1-2 lists the current support organizations, and their controlling headquarters, which provide or coordinate for ARSOF logistical support. The theater army special operations support command (TASOSC) is the ARSOF CSS planning and coordinating headquarters at the theater army level and is the primary interface between the theater army support command and the ARSOF. The TASOSC is a functional headquarters under the theater army command (TACOM). There are five TASOSCs, one located in each theater of operation. The second element of Table 1-2 is the 528th special operations support battalion (SOSB). The 528th SOSB is a functional command in the U.S. Army Special Forces Command (USASFC). The 528th SOSB is designed to provide limited direct support to ARSOF units conducting contingency operations [Ref. 2:p. 14-5]. The last organization listed in Table 1-2 is the ranger support element (RSE). The RSEs are comprised of U.S. Army Forces Command (FORSCOM) units which are located on the same installations as the ranger battalions. There are three RSEs, one for each ranger battalion, which provide limited direct support to deploying ranger battalions. The RSEs are designed to support the deployment of a ranger battalion from its home station and, if required, are capable of deploying in support of the ranger battalion overseas.

TABLE 1-2

ARSOF SUPPORT ORGANIZATIONS

UNIT	STRENGTH
Theater Army Special Operations Support Command (TASOSC)	500 (100 X 5)
528th Special Operations Support Battalion	150
Ranger Support Element	360 (120 X3)
Total Force	910

b. Army Special Operations Task Force: Baseline Structure

Army special operations forces operate at the direction of the Joint Chiefs of Staff in support of theater army contingency operations. Typically, an army special operations task force (ARSOTF) is organized to conduct a contingency operation. Table 1-3 shows the baseline ARSOTF composition used during the analysis portion of the thesis.

Table 1-4 lists three types of task force configurations in which ARSOF could be organized. The three configurations are given to show the range of the ARSOF organizational structure in contingency operations. Configuration A in Table 1-4 is the joint special operations task force (JSOTF). The JSOTF is typically organized to

TABLE 1-3
ARSOTF BASELINE STRUCTURE

UNIT	STRENGTH
HQ Ranger Regiment	100
Ranger Battalion	900
Special Forces Team	50
Psychological Operations Team	10
Civil Affairs Team	10
Special Operations Communications Section	25
Total Force	299

TABLE 1-4
RANGE OF ARSOF TASK FORCE CONFIGURATION

Configuration	Type	Location within Range
A	JSOTF	Upper limit
B	ARSOTF	Middle Limit
C	ARSOTF	Lower Limit

support large contingency operations and is the largest task force configuration under which ARSOF could operate.

The JSOTF, as the name implies, is comprised of special operations forces from each service component. The CSS for the JSOTF is the responsibility of each unit's parent service, unless otherwise directed by the JSOTF commander.

The second task force listed in Table 1-4, Configuration B, is the baseline ARSOTF described in Table 1-3. This task force is comprised solely of Army special operations forces and is mid-size in terms of the range of task force configurations. Configuration B includes components from each of the ARSOF. The last task force configuration listed in Table 1-4, Configuration C, is the smallest configuration under which ARSOF could operate. This task force is typically organized in support of very sensitive Army contingency operations (i.e., counter-terrorism) and could operate within a joint task force or independently. Configuration C does not include all of the ARSOF components, but is limited to uniquely trained and equipped ARSOF.

2. The Problem

The problem examined in this thesis is whether the current ARSOF support command and control structure (Table 1-2), designed to support the baseline ARSOF and ARSOTF (Tables 1-1 and 1-3), is the best structure, in terms of planning efficiency, suited for the command and control of all ARSOF support assets. The purpose of the analysis is to determine if an alternative ARSOF support structure is more appropriate

for the command and control of ARSOF support assets. The problem analysis will focus on comparing three alternative ARSOF support structures to the light infantry division support structure.

The current movement within the Army special operations community with respect to ARSOF support doctrine and structure is to continue establishing the Theater Army Special Operations Support Commands (TASOSC) [Ref. 3] and to reorganize the 528th Special Operations Support Battalion (SOSB) into a special operations support unit (SOSU), so it can perform dedicated direct support to ARSOF [Ref. 4]. In addition, effort is underway to establish a dedicated support unit for the Rangers, a Ranger Support Battalion (RSB) [Ref. 5]. The RSB is designed to replace the RSE structure and move the command and control from FORSCOM to U.S. Army Special Operations Command (USASOC).

The value of an adequate ARSOF support structure is important to the successful completion of special operations missions. The increased use of ARSOF units and ARSOF missions in support of national political and economic objectives makes the formulation of an adequate ARSOF support structure very critical. According to General Stiner, Commander USSOCOM, the use of special operations forces is foreseen to continue into the 1990's.

The crystal ball of the 1990's remains clouded, but one thing for certain: as long as there is insurgency, narcotrafficking and terrorism somewhere in the world, the

quiet professionals of the U.S. Special Operations Command (USSOCOM) will remain primetime players in the Third World network of conflict. [Ref. 6]

Two years of experience as the assistant logistician of the 75th Ranger Regiment allowed the author to see first hand the various logistical problems that face ARSOF planners. The sustainment of ARSOF during peacetime, and within the various levels of the conflict spectrum, is just as critical as, and may be more critical than, the sustainment of conventional forces. While ARSOF units and missions do not place inordinant pressure on the Army logistical system, ARSOF logistics operations must be intensively managed in order to support highly classified special operations.

B. OBJECTIVE

The objective of this thesis is to conduct a comparative analysis of three alternative ARSOF support command and control structures to the conventional light infantry division support command and control structure and to determine if the current ARSOF support command and control structure (Table 1-2) requires realignment. The thesis is focused on providing recommendations to the ARSOF force planners and developers in their formulation of a new ARSOF support structure.

The research has been oriented toward answering the following questions:

- Is a special operations support command (SOSCOM) required to manage all SOF CSS units?
- What would be the appropriate mission and organization of such a SOSCOM unit?

C. SCOPE AND LIMITATIONS

This thesis is written to assist decision makers and force developers in their effort to formulate an adequate ARSOF support structure. In addition, the thesis is designed to be used as a reference document for future studies of ARSOF logistics.

The scope of the research is centered at the internal logistical support of active duty Army special operations forces in the low-intensity conflict (LIC) spectrum. The intended audience of the thesis are ARSOF force developers and army logisticians with ARSOF CSS exposure.

The thesis analysis is limited to the four measures of effectiveness (MOEs) defined in Chapter VI. The MOEs were selected to highlight the complexity of planning ARSOF logistical support. In addition, the four MOEs used in Chapter VI for the comparative analysis were chosen within the scope of the author's knowledge.

The thesis is primarily focused on the *peacetime contingency operations* and *peacekeeping operations* components of the LIC spectrum. The foreign internal defense, proinsurgency, terrorist counteraction, and antidrug operation components of LIC have

more unique logistics requirements and are not within the scope of the research.

The research has concentrated on the Army's internal operational logistics for ARSOF. This thesis attempts to present the view of the "logistician on the ground" in discussing the ARSOF support structure and the facts of ARSOF logistics. The research has been limited to the ground forces of ARSOF. Army special operations aviation has not been included in the scope of this research. Special operations aviation logistical problems are quite different from those of ARSOF ground forces and time limitations prevent their inclusion in this research.

D. ORGANIZATION

This chapter has provided an introduction to the thesis. It has provided the baseline force structure of ARSOF units and the ARSOF support structure, a general background for the problem, the objectives of the thesis research, the specific research questions, and the scope and limitations of the research. Chapter II describes the methodology of the thesis and contains a literature review.

Chapter III provides the reader with an overview of special operations forces within the Department of Defense. The chapter discusses the historical evolution of low-intensity conflict and special operations forces, the

creation of the current Army special operations forces command structure.

Chapter IV describes the support capabilities of ARSOF and the theater army. It describes each ARSOF unit and explains their organic logistical capabilities. The chapter also addresses the theater army support structure and explains the support doctrine in a developed and undeveloped theater.

Chapter V describes three alternative ARSOF support structures which provide CONUS and deployed support to ARSOF. In addition, the author introduces the proposed special operations support command (SOSCOM) concept as one of the three alternatives. The chapter also explains the support structure of the 7th Infantry Division (Light) as a comparison alternative.

Chapter VI is the comparative analysis of the four alternatives described in Chapter V. Chapter VI defines four measures for a command and control support structure:

- Combat Forces-to-Support Forces Ratio.
- Number of support planning nodes/channels.
- Proximity of support planning nodes.
- Number of organic and nonorganic support units.

The comparative analysis of the four support structure alternatives is then based on the defined measures.

Chapter VII discusses the conclusions found from the analysis in Chapter VI and provides recommendations for future actions.

II. LITERATURE REVIEW AND METHODOLOGY

A. METHODOLOGY

The thesis questions presented in Chapter I lend themselves to a comparative analysis method of research. The use of literature reviews, personal and telephone interviews, and personal and participant observations establish the foundation of the research.

Four steps were used in conducting the research. The first step defined the parameters and scope of the problem. The parameters of the problem were defined as the internal command and control of ARSOF support units. The scope of the problem was defined to encompass the logistics doctrine and force structure of all active army special operations ground forces operating both in garrison and deployed in support of contingency operations.

Included in the first step of the research was the establishment of the current position of the problem relative to other issues (e.g., the middle-east crisis). Table 2-1 lists the various agencies and organizations which were contacted during the research in order to determine the Army's perception of the problem. The research established that the problem is of great importance in the army special operations forces and combat services support communities and has great interest at the department of Army staff level.

TABLE 2-1

AGENCIES AND ORGANIZATIONS

J4, United States Special Operations Command (USSOCOM)

DCSLOG, United States Army Special Operations Command (USASOC)

G4, United States Army Special Forces Command (USASFCOM)

XO and S4, 75th Ranger Regiment

S4, 96th Civil Affairs Battalion

S4, 4th Psychological Operations Group (POG)

XO, 528th Special Operations Support Battalion

SPO, 7th Infantry Division (Light) Support Command

Concepts and Doctrine Directorate, United States Army Combined Arms Support Command (PROV)

United States Army John F. Kennedy Special Warfare Center and School

The second step involved learning about what was done and is presently being done to change the current ARSOF support structure. Once again various agencies were contacted to determine the present status of work on the problems. In addition to the interviews, past and current literature written on the topic was reviewed. This phase of the research revealed that the U.S. Army J.F.K. Special Warfare Center and School (SWC) was conducting a special operations forces (SOF) combat service support (CSS) review [Ref. 4] and

that the U.S. Army Infantry Center (USAIC) was conducting research on the creation of a Ranger Support Battalion (RSB) [Ref. 5].

An integral part of this phase of the research was the collection of pertinent literature. The literature provided a foundation for the discussion, in Chapter III, on the evolution of the ARSOF command structure and the logistical capabilities of the ARSOF units described in Chapter IV.

Step three of the research involved the conduct of a comparative analysis between the three ARSOF support command and control structures to the 7th ID(L) support command and control structure. This step of the research provided the data to establish the four alternatives for the analysis. Included in this step was the identification and definition of the measurements used in comparing the four alternatives.

The conclusions and recommendations, which comprised the final step, were based on the results of the comparative analysis conducted in step three.

B. LITERATURE REVIEW

The research encompassed numerous resources. Instrumental in the research was the use of the various literature data bases, military sources (interviews and documentation), and public sources. The data bases which were utilized included the Defense Logistics Studies Information Exchange (DLSIE) and the Defense Technical Information Center (DTIC).

The information obtained from these supporting agencies provided a general literature base from which relevant information was acquired.

The combat service support of army special operations forces has been and continues to be an area of concern. In 1989 COL Harper [Ref. 7] addressed the logistical problems of special operations as 'mission stoppers.' The issues which were raised by COL Harper pertained to the limited support capabilities of ARSOF. In addition, COL Harper discussed the problem of limited to nonexistent theater army support in undeveloped theaters. COL Harper suggests the establishment of dedicated support capability or additional organizational logistics capabilities for ARSOF. In a later article [Ref. 8], COL Harper addresses the fact that logistics for low-intensity/high-probability conflict received inadequate attention in training and doctrine during the 1980's. The article was a case study of logistics in Grenada. The conclusion of the study emphasized the unwieldy and inefficient logistic support provided during "no-plan operations" and recommended higher emphasis be placed on training logisticians in the support of contingency operations.

In September 1989 the draft version of the Operational Concept for Logistics Support to Special Operations Forces delineated the doctrinal concept for logistic support for ARSOF [Ref. 9]. The document established the basis for the

evolving doctrine of how logistic support will be provided to ARSOF in both developed and undeveloped theaters by both special operations and conventional U.S. Army logistics units. The operational concept began development after March 1988, after the Army Training and Doctrine Command decided to include a chapter on logistics support of special operations units in each of the capstone manuals [Ref. 7:p. 11]. The draft of the Operational Concept for Logistics Support to Special Operations Forces provided the foundation for the doctrinal discussion in Chapter IV.

The Operational Concept for Logistics Support to Special Operations Forces [Ref. 9] and Chapter 14 of Field Manual 100-25, "Special Operations Forces" [Ref. 2] provide the foundation for the establishment of the three alternatives discussed in Chapter V and the analysis conducted in Chapter VI. These documents describe the current and evolving combat service support doctrine for ARSOF in developed and undeveloped theaters.

The Assessment Report (AR) for the Theater Army Special Operations Command (TASOC) [Ref. 3] solidified the need for an ARSOF support planning and coordinating organization at the theater army level. The authors' assessment of the TASOC determined a need to refine the TASOC operational concept from a command and control organization to a planning and coordinating organization. The report recommended the continued development of the TASOC concept and the

establishment of a TASOC in each of the five theater army commands. In addition, the report recommended the TASOC be renamed the Theater Army Special Operations Support Command (TASOSC). The TASOSC refined the TASOC mission and organization with the concept of planning and coordinating of support and sustainment for ARSOF with theater Army [Ref. 3:p. 3].

The current ARSOF CSS Review [Ref. 4], being conducted by the U.S. Army J.F.K. Special Warfare Center and School (SWC), is the culmination of past studies and articles, from various individuals, agencies, and organizations. The review was initiated at the direction of the commander in chief U.S. Special Operations Command (USSOCOM). The Review has focused on ARSOF logistical lessons learned from ARSOF exercises and Operations Urgent Fury and Just Cause. The Review's purpose is to determine the shortfalls of ARSOF support at the theater level and operational level and provide recommendations to fill the shortfalls.

The SOF CSS Review was started as a direct result of the after action review comments from Operation Just Cause. The SOF CSS Review was initiated in April 1990 by the U.S. Special Operations Command (USSOCOM) at the direction of the Vice Chief of Staff of the Army. USSOCOM tasked the U.S. Army Special Operations Command (USASOC) and SWC to review the ARSOF support requirements. SWC and the Army Logistics

Center developed a three phase study, the scope of which was to:

- Determine the required capabilities.
- Determine the available capabilities.
- Determine the capabilities shortfalls.
- Determine the best fix. [Ref. 4]

Phase I of the review, determination of the requirements and capabilities, was conducted from April to August 1990. This phase included a subject matter expert study group, the development of recommendations and a draft operational and organizational (O&O) concept for the special operations support unit (SOSU), which would realign the current 528th SOSB structure. Phase II, development of a recommended ARSOF support structure, was conducted from August to November 1990. This phase included finalizing the SOSU concept and a draft and finalized organizational design. The draft SOSU design is shown in Figure 2-1 [Ref. 4]. The proposal is to develop the current 528th SOSB into a larger organization with the capability of providing direct support to all ARSOF units deployed in support of contingency operations. The current 528th SOSB personnel strength is 150. The SOSU proposal would increase that strength to 750 personnel [Ref. 4]. The new structure includes the development of a main support company (MSC), which is to include a materiel management center (MMC), and three forward area support companies (FASC). The MSC and FASCs would provide CONUS

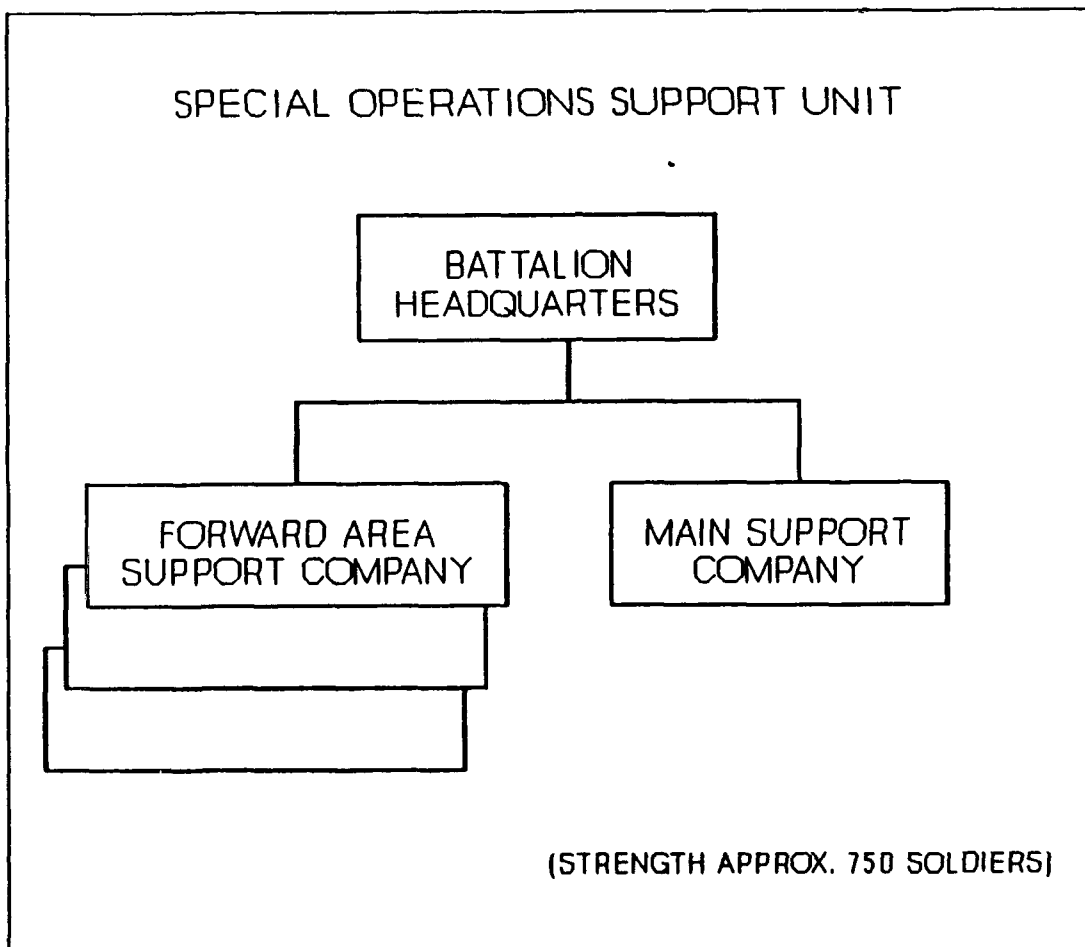


Figure 2-1 Proposed SOSU Organization

support to ARSOF co-located at their respective installations and would be capable of deploying overseas in support of ARSOF conducting contingency operations.

Phase III, implementation of the approved structure, is scheduled to begin in 1991 [Ref. 4].

The final significant study researched for the thesis is the Ranger Force Operational and Organizational concept study being conducted by the U.S. Army Infantry Center (USAIC)

[Ref. 5]. The proposal being made by the USAIC, through the study, is to create a ranger support battalion (RSB). The proposed RSB would provide support to CONUS based and deployed ranger forces. Figure 2-2 [Ref. 5] shows the proposed organization of the RSB. The proposed RSB would contain approximately 400 personnel and would replace the three RSEs which total approximately 360 personnel. The RSB would contain three forward support companies (FSC), one for each ranger battalion, and a headquarters and support company (HSC). The RSB theory is to replace the RSEs with a support organization which is controlled by the U.S. Army Special Operations Command (USASOC) as opposed to the current organization in which the RSEs are under the control of U.S. Army Forces Command (FORSCOM).

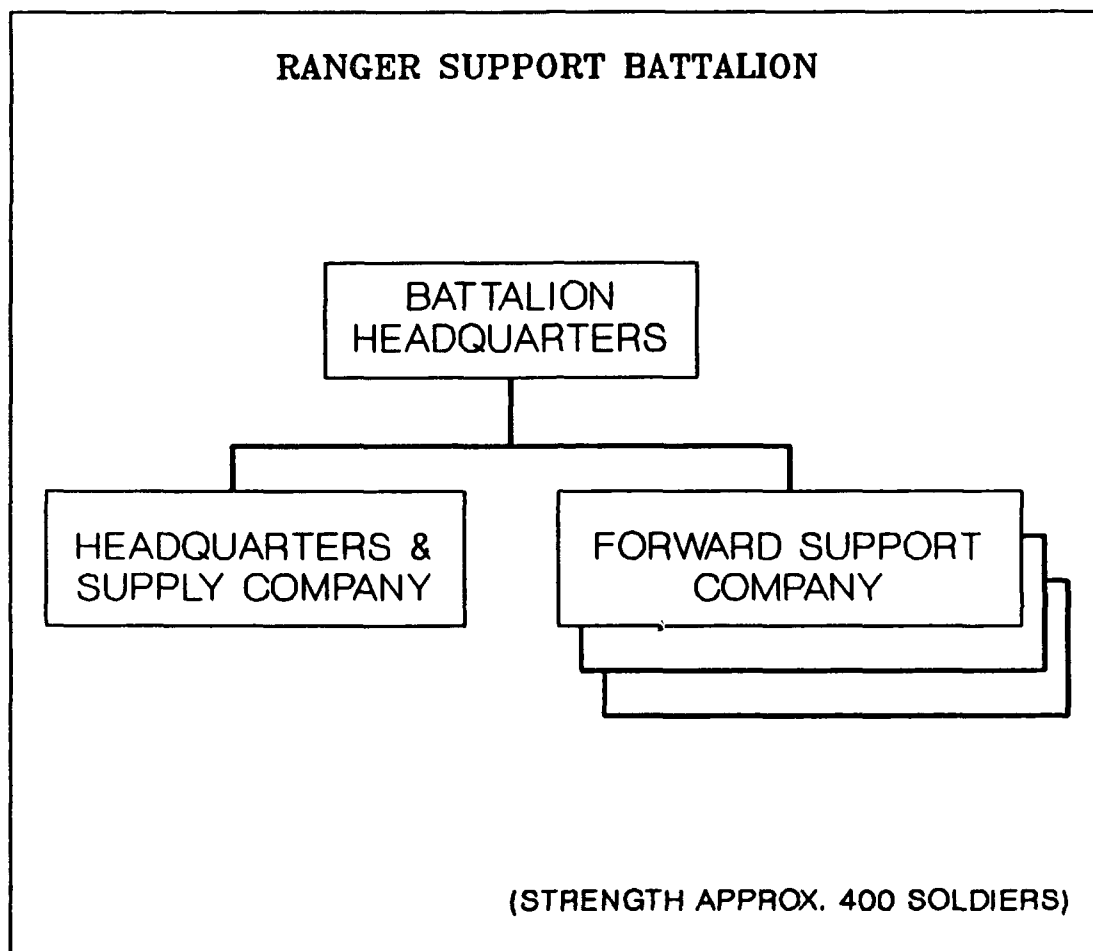


Figure 2-2 RSB Organization

III. BACKGROUND

This chapter will briefly review the history of low-intensity conflict and special operations. It will provide an overview of the Department of Defense (DoD) and Army special operations command structure.

A. HISTORICAL BACKGROUND

The foundation of today's U.S. policy and doctrine on low-intensity conflict (LIC) and special operations (SO) can be traced back to the Kennedy administration. This administration developed a doctrine/policy which was based on a "multilevel response to the revolutionary threat." [Ref. 1:p. 22] They saw the revolutionary movements in underdeveloped countries as the latest attempt by the communists to undermine democracy.

In January, 1961, when President Kennedy asked what the Pentagon and State Department were doing about guerrilla warfare, the response he received was that very little was being done. Revolution, insurgency, and guerrilla warfare were at the bottom of the list for the nation's policy makers. The State Department and the Department of Defense were in the midst of the cold war, battling the Soviet Union's strategies in Europe and the Chinese Communist threat

to East Asia. Underdeveloped countries and their internal upheavals were considered peripheral to U.S. policy.

By late 1961 President Kennedy felt that a shift from conventional and nuclear strategies to unconventional strategies was overdue.

Containment of the Soviet Union through nuclear deterrence had not proved to be an adequate response to insurgency and indirect aggression against vulnerable Third World governments friendly to the United States. Even a conventional-warfare response seemed inappropriate....
[Ref. 1:p. 21]

The President viewed the success of insurgency movements in Algeria and Indochina, the defeat of the Chinese Nationalists, and budding insurgencies in Southeast Asia as "ominous portents of trouble to come from unexpected quarters." [Ref. 1:p. 22] President Kennedy's reaction to this "emerging threat" was to direct his senior advisors to develop a multilevel response to the revolutionary threat. What finally emerged was the first comprehensive effort by the U.S. government to devise a politicomilitary doctrine to thwart the revolutionary threat. That doctrine has evolved into the plan which is today used to deal with Low-Intensity Conflict.

B. LOW-INTENSITY CONFLICT VERSUS SPECIAL OPERATIONS

At this point it is important to differentiate between the terms low-intensity conflict (LIC) and special operations (SO). The primary difference between LIC and SO is that LIC is confined to a specific portion of the conflict spectrum

whereas SO extends over the entire range of the spectrum. In addition, LIC is a type of warfare whereas SO are specific missions which function in support of various types of warfare. Figure 3-1 [Ref. 8] shows the three major conflict areas, low, mid, and high, and their relationship to the probability of occurrence and the risk associated with that area. LIC has high probability of occurrence with a low risk factor. Special operations are predominately associated with LIC but may occur over the entire range of the spectrum.

1. The Low-Intensity Conflict Spectrum

Low-intensity conflict has been a difficult concept for DoD planners and policy makers to define. The debate over the definition centered around how broad or narrow a spectrum the LIC doctrine should support. Some strategists, like Colonel Waghelstein, who commanded U.S. advisors in El Salvador, felt that LIC was primarily another word for counterinsurgency [Ref. 1:p. 53]. Other strategists, like Lieutenant Colonel John M. Oseth, 1984-1985 Army Fellow at the Center for Strategic and International Studies, Georgetown University, felt that low-intensity conflict extended over a broader range of threats. According to LTC Oseth included in this spectrum are "insurgency and counterinsurgency operations, terrorism and counterterrorism, surgical direct action military operations, psychological warfare, and even operations by conventional or general

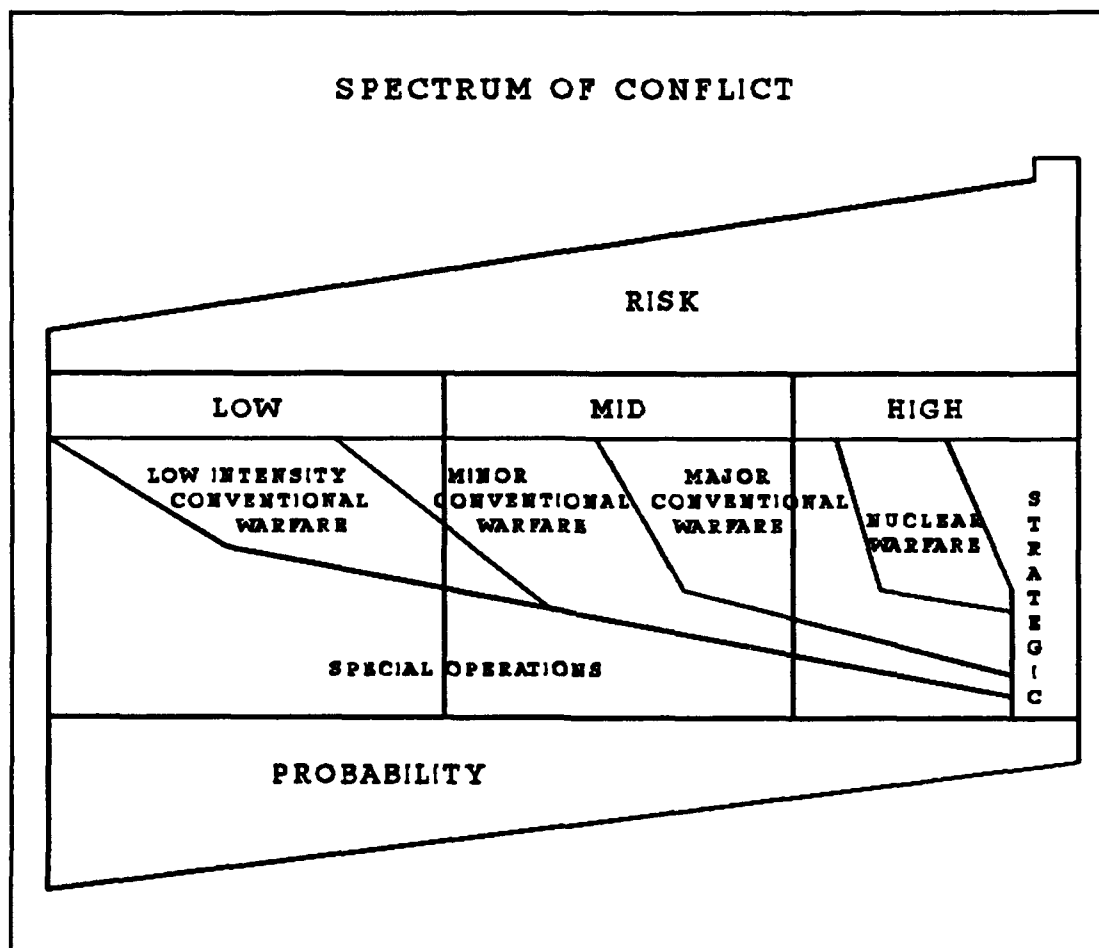


Figure 3-1 Conflict Spectrum

purpose forces." [Ref. 10] In 1985 the Joint Chiefs of Staff (JCS) agreed on the following definition:

Low-intensity conflict is a limited politico-military struggle to achieve political, social, economic, and psychological objectives. It is often protracted and ranges from diplomatic, economic, and psycho-social pressures through terrorism and insurgency. Low-intensity conflict is generally confined to a geographic area and is often characterized by constraints on weaponry, tactics, and the level of violence. [Ref. 1:p. 53]

Low-intensity conflict doctrine for the U.S. Army is spelled out in several key documents (e.g., Field Circular 100-20, Low-Intensity Conflict"(FC 100-20) and Training and Doctrine Command Pamphlet 525-44, U.S. Army Operational Concept for Low Intensity Conflict (TRADOC PAM 525-44)) and has been subdivided into six mission categories in this literature. These mission categories are:

- Foreign Internal Defense.
- Proinsurgency.
- Peacetime Contingency Operations.
- Terrorism Counteraction.
- Antidrug Operations.
- Peacekeeping Operations. [Ref. 1:pp. 55-56]

The primary means used by forces to accomplish these missions are conventional arms and equipment, with some special operations support.

2. Special Operations

While low-intensity conflicts may be supported by special operations forces and missions, LIC warfare is constrained by the parameters established in the JCS definition. In contrast, special operations support all levels of the conflict spectrum. These operations are most prevalent in the LIC part of the warfare spectrum but are also integral to winning mid- and high-intensity conflicts. Special operation missions include raids, deep strikes, disruption of enemy lines of communications and command and

control, and training of indigenous forces. The use of special arms and equipment supports the accomplishment of these missions.

C. SPECIAL OPERATIONS FORCES COMMAND STRUCTURE

1. DoD Special Operations Command Structure

The revitalization of SOF during the Reagan "build-up" has continued during the Bush administration. Throughout the Reagan administration each service continued to improve separate SO programs. In 1982 the Army established the 1st Special Operations Command (1st SOCOM) at Fort Bragg, NC. The Air Force, in 1983, consolidated its SOF and search and rescue units into the newly created 1st Special Operations Wing (1st SOW) within the 23rd Air Force at Hurlburt Field, FL. The Navy has established the Naval Special Operations Command, located at Naval Amphibious Base, Coronado, CA. These unilateral developments led to Congressional claims of mismanagement of resources and redundancy of effort. The claims led to the establishment of a new layer of bureaucracy within the SOF community.

DoD took a number of actions in an attempt to solve the mismanagement problems. These actions included the following:

- The Defense Guidance (DG) in 1981 specified that DoD would develop a special operations capability.
- The DG specification was expanded in 1983 to include the ability to conduct special operations worldwide by 1990.

- In 1984 an advisory council to the Joint Chiefs of Staff and the Joint Special Operations Agency (JSOA) were established. [Ref. 11:p. 1-2]

The JSOA mandate is

...to advise the JCS on all aspects of special operations, including strategy, planning, budget, resource development and allocation, doctrine, training, and employment of forces. [Ref. 1:p. 84]

In spite of these actions members of Congress continued to criticize special operations forces. Senator William S. Cohen (R-ME) stated that special operations forces remained "scattered among the Services, badly underfunded, and lacking any clear and coherent mission." [Ref. 12]

In response to Congressional concerns, DoD and Congress began a debate over the proper resolution to the management problems. DoD proposed a special operations command in the "National Capital Region headed by a three-star flag or general officer to supplement JSOA [Joint Special Operations Agency]." [Ref. 11:p. 1-2] Within Congress, the House Armed Services Committee proposed a separate "National Special Operations Agency" and the Senate Armed Services Committee's alternative was the establishment of a "unified combatant command led by a four star officer." All three proposals were centered around the "perceived need to streamline the command and control of SOF capabilities and to develop a common doctrine and strategy for these disparate [SOF] units." [Ref. 11:p. 1-2]

The debate ended in 1986 with the passage of the National Defense Authorization Bill for Fiscal Year 1987. Under this law the United States Special Operations Command (USSOCOM) was established at MacDill AFB, FL. This new unified combatant command is responsible for developing doctrine, coordinating strategy, and training and equipping all DoD SOF detachments.

2. Army Special Operations Forces Command Structure

The command structure of Army Special Operations Forces (ARSOF) has changed numerous times since its revitalization in the early sixties. The end of WWII saw a steady decline of special operations units. This post-war decline was reversed on June 19, 1952 with the activation of the 10th Special Forces Group (SFG). Over the next ten years six more SFG's were activated, two in the late fifties and four more in the early sixties. President John F. Kennedy was a very strong advocate of the SFG's because they were a visible tool which supported his new proinsurgency policies [Ref. 1:p. 38].

Vietnam was used by the policy makers to promote the SFG's and their capabilities [Ref. 1]. The groups were used in their Foreign Internal Defense (FID) and direct action roles. In their FID role the SFG's supported the Military Assistance Command, Vietnam's (MACV) "strategic hamlet program." This program called for the establishment of secure self-sustaining economic villages in which the local

peasants could pursue their way of life [Ref. 1:p. 39]. The SFG's were under the command and control of MACV for these missions. The groups also used their direct action mission capability to support the plans of various U.S. Army division and corps headquarters.

The use of long-range reconnaissance and surveillance units by the various U.S. headquarters in Vietnam revitalized the use of the Ranger type forces which were deactivated at the end of WWII [Ref. 13:p. F-4]. The Ranger units were assigned to independent brigade, division, and field force units and conducted long-range reconnaissance and exploitation operations into enemy held and U.S. denied areas.

Though not formally recognized as special operation forces at the time, psychological operation and civil affairs forces were used extensively in Vietnam. These units were assigned or attached to other units in order to support the commander's objectives.

The ARSOF command structure during Vietnam was very decentralized. Each ARSOF unit worked for their supporting headquarters. There was no formal Army-wide special operations command. ARSOF units received their logistical support from the unit they were assigned or attached to at the time. Their needs were minimal and had little impact on the much larger logistical concerns of the units the special operations forces were attached or assigned to.

After Vietnam, many of the special operation units were deactivated or relocated into the Reserves. DoD and the Army had little use for SO units during the seventies. ARSOF was given low priority on the budget and readiness scale. The effect that the low priority had on ARSOF can be seen in a specific special operation mission, the failed attempt to rescue the Iranian hostages in 1980, Desert One. As a result of Desert One the Joint Chief's of Staff (JCS) gave "higher priority to the study of unconventional warfare and the strengthening of a...special-warfare force...." [Ref. 14] In addition, in a study for the Congress on military posture for fiscal year 1983, the JCS stated:

The current special operations forces levels reflect serious shortfalls in the number and types of units to meet requirements now and in the remainder of the decade. To offset this critical shortfall, a measured expansion of special operations forces is required. [Ref. 14]

The events discussed in the post-mission analysis of Desert One highlight serious readiness issues that were facing ARSOF [Ref. 14]. Events in the late seventies and early eighties showed that there were serious problems in the ways in which ARSOF were organized, trained, and equipped. [Ref. 11:p. 1-1]

As a result of these problems, on October 1, 1982 the Army established the 1st Special Operations Command (1st SOCOM) at Fort Bragg, NC. 1st SOCOM was established as a subordinate unit under U.S. Forces Command (FORSCOM). 1st SOCOM became the central command and control headquarters for

all Army special operations units--Special Forces Groups, Psychological Operations, Civil Affairs, Rangers, Special Operations Aviation, 112th Special Operations Communication Battalion (SOC^r), and the 528th Special Operations Support Battalion (SOSB).

On the surface this new command structure looked simple. All SOF units were to report directly to 1st SOCOM. 1st SOCOM would in turn report to FORSCOM. However, it was difficult for certain ties to be severed by the SOF units that came under the new command structure. An example of this can be seen with the Rangers and FORSCOM. The Rangers maintained command channels directly and indirectly with FORSCOM, with 1st SOCOM as an "info addressee." This was done to facilitate a streamlined command channel for JCS alert notifications (JCS to FORSCOM to the Rangers). In addition, the Rangers received their logistical support from ad-hoc FORSCOM units. These informal command channels created numerous conflicts in terms of mission tasking and funding support.

1st SOCOM lobbied to become a separate major command (MACOM) in order to sever all informal command channels and receive its own funding authority. In 1988 the Secretary of the Army, Michael P.W. Stone, approved the idea that 1st SOCOM would become a MACOM and transition from being a subordinate unit of FORSCOM. The plan had 1st SOCOM controlling all SOF including the SOF reserves.

The establishment of USSOCOM in 1987 and the subsequent granting of formal funding authority in 1988 had a significant impact on 1st SOCOM's bid to become a MACOM. Instead of transitioning to a MACOM, 1st SOCOM transitioned out from under FORSCOM to a subordinate unit to the newly formed MACOM, the U.S. Army Special Operations Command (USASOC). In addition to the establishment of USASOC the Army reorganized its SOF command structure. The 75th Rangers, Army special operations aviation (ASOA), 4th Civil Affairs (CA), 96th Psychological Operations Group (POG), and 1st SOCOM (currently called the U.S. Army Special Forces Command (USASFCOM)) became separate units under USASOC. Figure 3-2 depicts the current organization of USASOC within the USSOCOM.

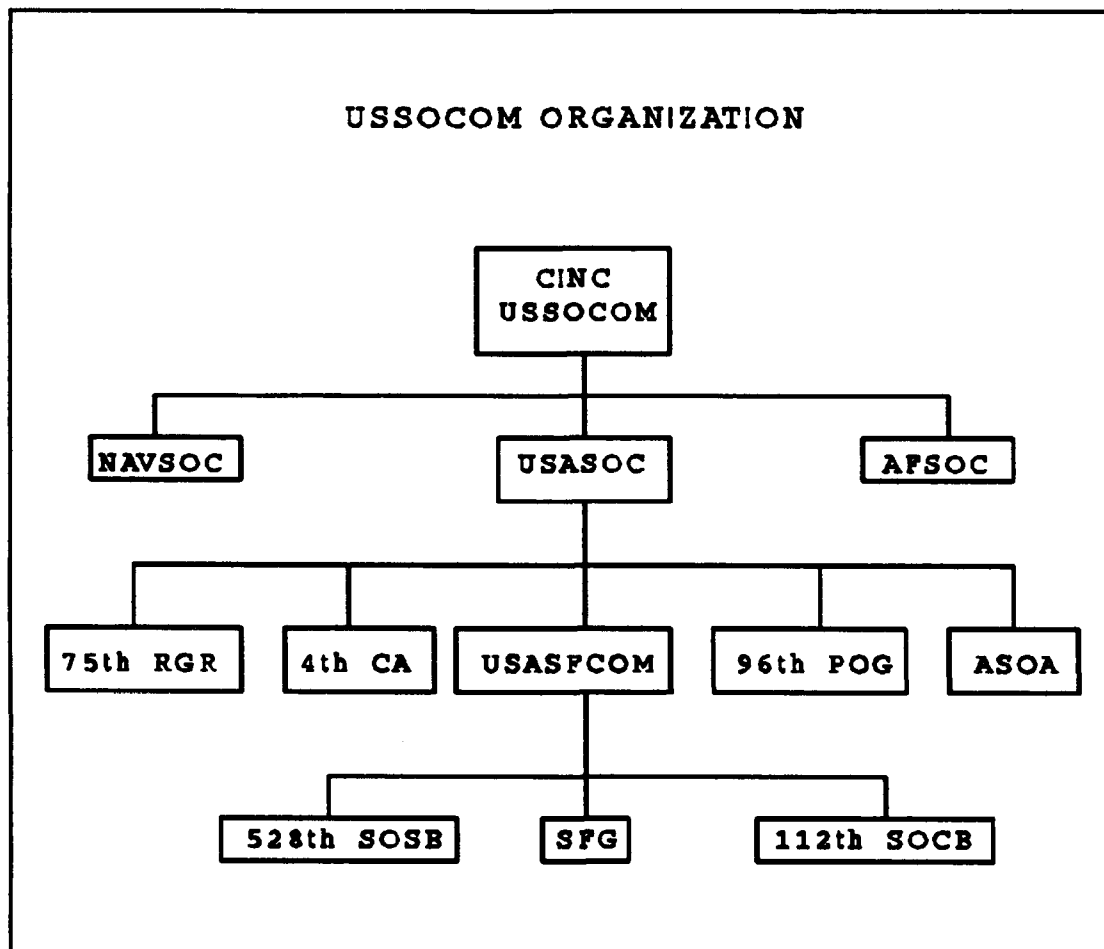


Figure 3-2 USSOCOM Organization Chart

IV. THE LOGISTICS OF ARMY SPECIAL OPERATIONS FORCES

This chapter will discuss the organic support capabilities of ARSOF. A brief explanation of each unit's organization and mission will be followed by a description of its organic support capabilities. In addition, the chapter will discuss the current organizations which are designed to coordinate for or provide support to ARSOF (TASOSC, 528th SOSB, and the RSE). Finally, the chapter will explain the support doctrine for ARSOF in theater army (TA) operations.

A. ARSOF LOGISTICAL CAPABILITIES AND LIMITATIONS

The components of Army special operations forces are the Special Forces Group, 75th Ranger Regiment, Special Operations Aviation, 4th Psychological Operations Group, and the 96th Civil Affairs Battalion. They function as combat multipliers to enhance the effects of conventional forces and can provide the supported commander with unique capabilities. Some ARSOF units operate under the operational control (OPCON) of a Joint Task Force Commander (JTFC), while others remain under the command of the theater army (TA) commander.

1. Special Forces Groups

a. Mission

The special forces are comprised of five active duty special forces groups (SFG). The SFG's have five

primary missions: unconventional warfare, foreign internal defense, direct action, special reconnaissance, and counter-terrorism.

Each SFG is composed of a group headquarters company, a group support company, and three special forces battalions. The special forces operational detachment A, also known as the A-team, is the basic SF unit. It is designed to conduct special operations in remote areas for extended periods with little external support. The A-team also serves as a manpower pool for special operations which do not require the full capabilities of the SF battalion. This allows the commander to organize tailored SF teams to conduct specific missions.

b. Organic Support

SFG's have the ability to deploy organizations which can provide limited support on a unit support basis. These SF support organizations can be augmented by other support units in order to support assigned or attached units. The primary support organization which SFG's deploy is the special forces operational base (SFOB). The other support organization which is deployed is the forward operational base (FOB).

The special forces operational base is a command, control, and support base established and operated by an SF Group from organic and attached resources. The SFOB commander and his staff coordinate and manage the activities

of one or more FOB's. The FOB is a command, control, and support base, subordinate to the SFOB, established and operated by an SF Battalion. The FOB commander and his staff train, control, and support SF teams in specific areas of operation. The primary difference between the SFOB and the FOB is the size and level at which they operate. The SFOB operates from the group level and is a larger organization due to the fact that it provides support to one or more FOB. The capabilities of the SFOB and FOB include:

- Requisition, receipt, storage, and distribution of all classes of supply.
- Procurement of non-standard equipment.
- Unit level maintenance for all assigned wheeled vehicles and power generation equipment.
- Unit and DS level maintenance for signal and COMSEC [communications security] equipment and limited GS support on SO peculiar communications and electronic (CE) equipment.
- Unit level maintenance for small arms.
- Limited motor transport services.
- Limited salvage collection.
- Unit level medical support.
- Personnel service support.
- Personnel and cargo parachute packing, rigging of supplies and equipment for airdrop, and airlift coordination (e.g., helicopter).
- Medical capability to provide routine and emergency services. [Ref. 9]

2. 4th Psychological Operations Group

a. Mission

The second component of ARSOF is the 4th Psychological Operations Group (Airborne). The 4th POG is the only active duty psychological operations unit. The group consists of a headquarters and headquarters company, a Strategic Dissemination Company, a Research and Analysis Company, and four psychological operations battalions.

Psychological operations units or teams will deploy as part of a supported unit or task force. The 4th POG's mission includes the communication of "selected information and indicators to [enemies] to influence their emotions, motives, [and] objective reasoning...." [Ref. 7:p. 8] An example of the 4th POG's mission was demonstrated when General Noriega was seeking refuge in a Panamanian church during Operation Just Cause. The music and loud speakers that were used to continuously remind General Noriega of the strong nearby presence of U.S. military forces were operated by the 4th POG.

b. Organic Support

For normal logistical support, psychological operations units rely on the units they are attached to or supporting. The satisfying of special logistical requirements for the psychological operations group is dependent on theater level or host nation support.

The group's logistical section is responsible for the coordination and management of all logistical requirements of the 4th POG. Each company and battalion within the group have logistical personnel which coordinate, manage, and communicate logistical requirements to the group headquarters or the supported unit. The major operational equipment to be supported includes communication systems, printing presses, and broadcast systems. The major logistical challenge for psychological operations units is the transportation of their major operational equipment while deployed and operating in a theater area of operations.

3. 96th Civil Affairs Battalion

a. Mission

The third component of ARSOF is the 96th Civil Affairs Battalion (Airborne). The battalion, located at Fort Bragg, NC is the Army's only active duty civil affairs unit. It is comprised of four companies, each with a regional focus.

Civil affairs (CA) teams predominately deploy as part of a larger force. The mission of CA units is to

- Support the commander in the conduct of military operations.
- Advise and assist the commander in the fulfillment of his legal and moral obligations in accordance with international laws and agreements.
- Further the national and international policies of the United States. [Ref. 15]

Civil affairs units or personnel are assigned or attached to the supported command upon deployment. Civil affairs provides operational support to general purpose forces, foreign internal defense (FID), unconventional warfare (UW), and civil administration.

b. Organic Support

As with the 4th POG, civil affairs operational logistics support is the responsibility of the supported command. Support requirements are minimal for CA units. They deploy with very little equipment, if any at all. The normal size of a CA team is small (3-7 personnel) and has very little impact on the logistical requirements of the supported command.

The civil affairs battalion S4 staff is a planning and coordinating cell. The cell consists of a logistics officer, an NCOIC, and a supply technician. The mission of the CA battalion's logistics section is to:

Provide global Civil Affairs logistical support. This requirement includes (but is not limited to): Property accountability; Budget; Ammunition support; Service support; Equipment and supply requisitioning. [Ref. 16]

4. Rangers

a. Mission

The 75th Ranger Regiment is the fourth component of the ARSOF. The regiment is organized with three geographically dispersed ranger battalions and a regimental headquarters. The rangers are used in support of the peacetime

contingency operations, terrorism counteraction, and peacekeeping operation components of the LIC doctrine. The mission of the Ranger Regiment is

...to plan and conduct special military operations. These operations are conducted by specially trained, equipped, and organized forces against strategic or tactical targets in pursuit of national military, political, economic, and psychological objectives. They may support conventional military operations or they may be performed independently when conventional forces cannot be used. [Ref. 17:p. 1-1]

Ranger forces can be deployed into an area of operations (AO) in many different ways. Ranger units can deploy from their CONUS base directly to the AO. A more common method would be for the Ranger unit to deploy from a remote marshalling base (REMAB) or an intermediate staging base (ISB) before insertion into the AO.

b. Organic Support

The logistical organization of the Regiment is oriented around the coordination of the filling of support requirements for the Regiment. The Regimental S4 section consists of four officers (S4, assistant S4, Resource Management Officer, and the PBO) and four enlisted (NCOIC, PBO supply SGT, two clerks). The primary function of the Regimental S4 is to coordinate and manage the employment of all logistical support for the Regiment. Ranger units are supplied with the minimal equipment and personnel which enable them to flexibly respond and quickly succeed in any low-intensity conflict or special contingency operation. "Combat service support consists of the logistical and

administrative effort to maintain the [Regiment's] ability to fight." [Ref. 17:p. 8-1]

At the Ranger Battalion level the S4 coordinates with his supporting headquarters for the required resources to conduct the battalion's missions. The S4 also coordinates and directs the actions of the support platoon. The battalion support platoon provides limited organic support and coordinates with the Regimental S4 for the filling of direct support requirements. The platoon also provides limited support for assigned and attached units. The platoon consists of a support platoon leader, an ammunition NCO, and a food service section. The food service section consists of an NCOIC and eight cooks. The platoon does not have organic transportation.

B. COMBAT SUPPORT AND COMBAT SERVICE SUPPORT OF ARSOF

In addition to the organic support capabilities of the ARSOF units, there is one organization located in each theater which plans and coordinates for ARSOF support: the theater army special operations support command (TASOSC); there are two organizations which provide limited direct support to ARSOF units: the 528th Special Operations Support Battalion (SOSB) and the Ranger Support Element (RSE); and there is one unit which provides signal support to ARSOF: the 112th Special Operations Communication Battalion (SOCB).

Each support organization is limited in its support capabilities by its composition and available resources.

1. Theater Army Special Operations Support Command

The theater army special operations support command (TASOSC) is a major functional command of the theater army (TA).

Figure 4-1 [Ref. 3] shows the organization of the TASOSC.

The TASOSC consists of the following staff sections:

- Director of Personnel and Administration (DPA).
- Director of Intelligence (DOI).
- Director of Plans and Operations (DPO).
- Director of Logistics (DOL).
- Special Operations Staff Element (SOSE).
- Information Management Office (IMO).

The TASOSC has the mission of planning and coordinating the support and sustainment of ARSOF within its respective theater [Ref. 3]. The TASOSC commander and his staff:

- Plan and coordinate CSS and designated CS for theater ARSOF and, when directed, other service and allied SOF.
- Plan, coordinate, direct, and supervise CS and CSS operations of assigned and attached Army forces providing dedicated direct support to theater ARSOF and, when directed, other service and allied SOF. [Ref. 3]

The TASOSC DOL is responsible for planning, coordinating, and monitoring all classes of supply, transportation, maintenance, and field services for deployed ARSOF units. The DOL coordinates all ARSOF support requirements with the TA. The theater army (TA), in turn, provides ARSOF

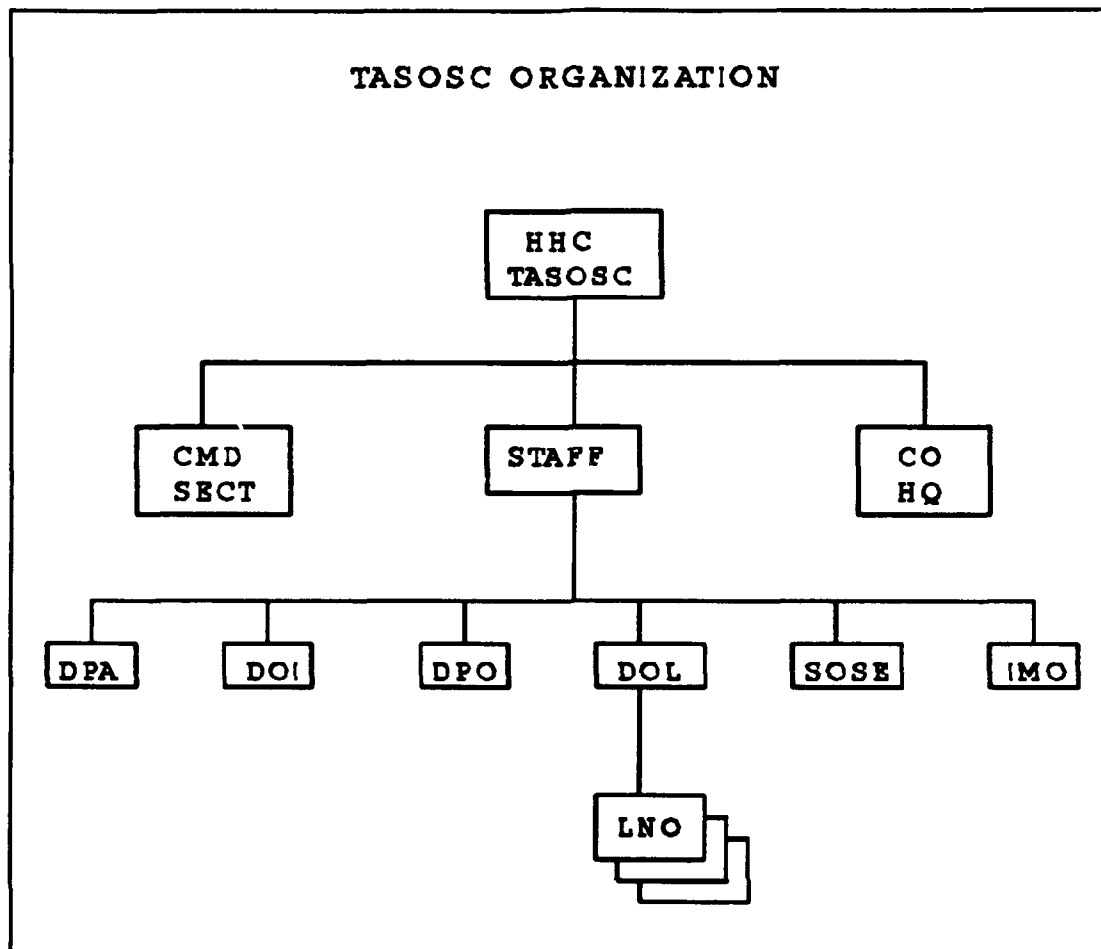


Figure 4-1 TASOSC Organization Chart

with the required support through it's subordinate functional commands and through area-oriented commands.

2. 528th Special Operations Support Battalion

The 528th Special Operations Support Battalion (SOSB) is located at Fort Bragg, NC. The battalion was activated in June 1986 as the 13th SOSB, and redesignated the 528th SOSB in May 1987. The present mission of the battalion is:

To provide dedicated administrative logistical [garrison] support to the Headquarters Army Special Operations Command (HQ ARSOC). When directed to provide support to other Army Special Operations Forces (ARSOF). [Ref. 18]

When directed to provide support to other Army Special Operations Forces (ARSOF). [Ref. 18]

The battalion is comprised of a Headquarters and Headquarters Company (HHC), Supply Company, Maintenance Company, and a Transportation Company. Figure 4-2 [Ref. 18] shows the current organization of the 528th SOSB.

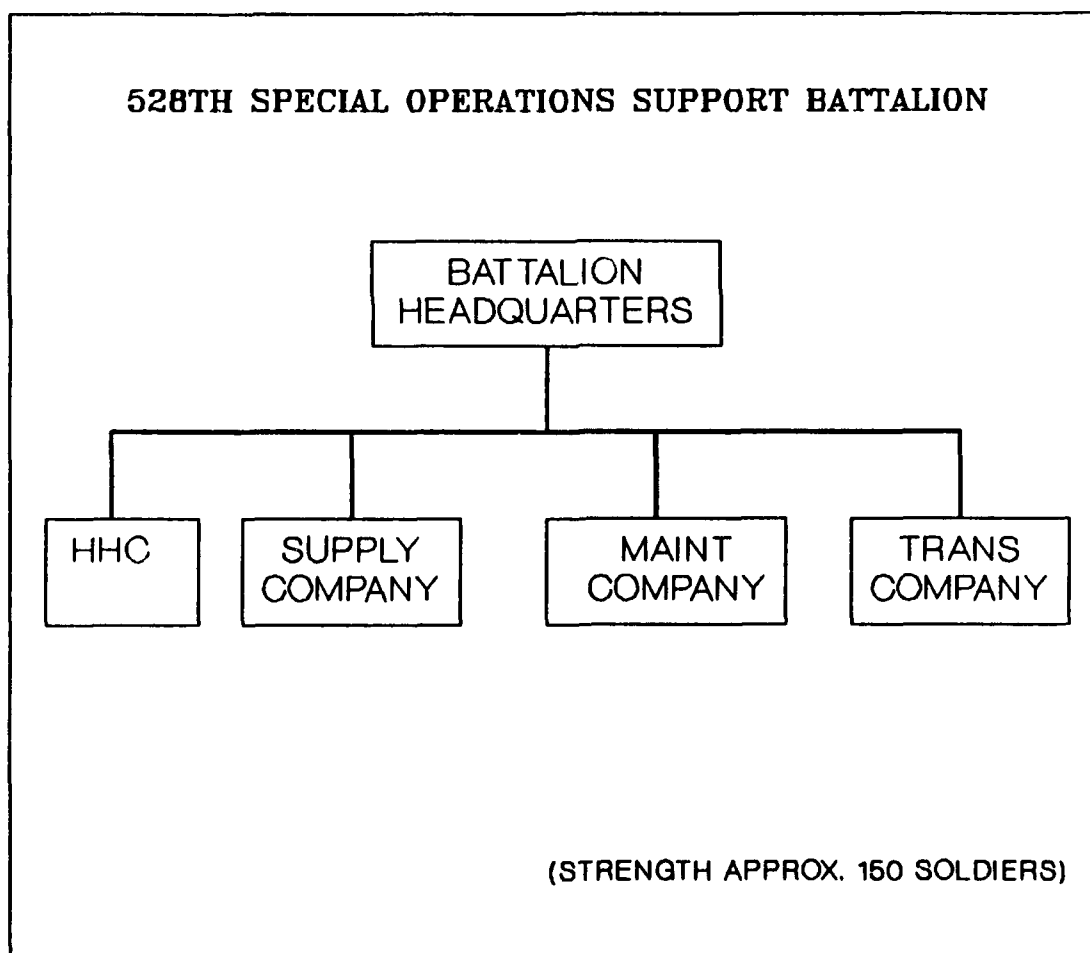


Figure 4-2 528th SOSB Organization

The 528th SOSB capabilities include the following:

- Headquarters Company.
 - * Medical Section: two teams and [a battalion] aid station;
 - * Food Service Section: four mobile kitchen trailers;
 - * Materiel Management Section.
- Supply Company.
 - * Petroleum Products Section: four forward area refueling equipment sets; two fuel system supply points;
 - * Ammunition Support Section;
 - * Supply Section.
- Maintenance Company.
 - * Direct support maintenance section;
 - * Organizational maintenance.
- Transportation Company.
 - * Movement Control Section;
 - * Light Truck Section: 250 passengers or 150 tons per lift. [Ref. 18]

The present organization of the battalion is under evaluation as part of the SOF CSS Review. Recommendations by the J.F.K. Special Warfare Center and School include the addition of a Materiel Management Center (MMC) and a responsive, deployable direct support capability.

3. Ranger Support Element

The Ranger Support Element (RSE) is an ad hoc support unit which is established when directed by the Ranger Regiment. The RSE is a special support element provided by

host installation commanders at CONUS posts where ranger units are stationed. Figure 4-3 shows the generic RSE organization. It consists of elements and teams from either U.S. FORSCOM TOE CS and CSS units stationed at the installation or from the table of distribution and allowances (TDA) organizations under the command of the installation commander. Each RSE maintains the same readiness posture as its supported ranger battalion. However, the RSE elements are only activated and collectively organized when the rangers receive alert notification.

The RSE provides the necessary logistical support to ensure the timely and efficient deployment of a ranger battalion. The mission of the RSE is to provide all the support needed to outload and deploy a ranger unit from CONUS [Ref. 17:p. 8-1]. During CONUS deployments, the RSE is responsible for both the departure and the reception support provided to the ranger battalion. During outside continental United States (OCONUS) deployments, the RSE is responsible for initial deployment and continuing OCONUS support until the deploying ranger force is under the operational control (OPCON) of the supported unified command or joint task force (JTF).

When the ranger battalion is deployed overseas, the responsible theater commander assumes support of the ranger battalion at the remote marshalling base (REMAB) or the intermediate staging base (ISB). On deployments that require

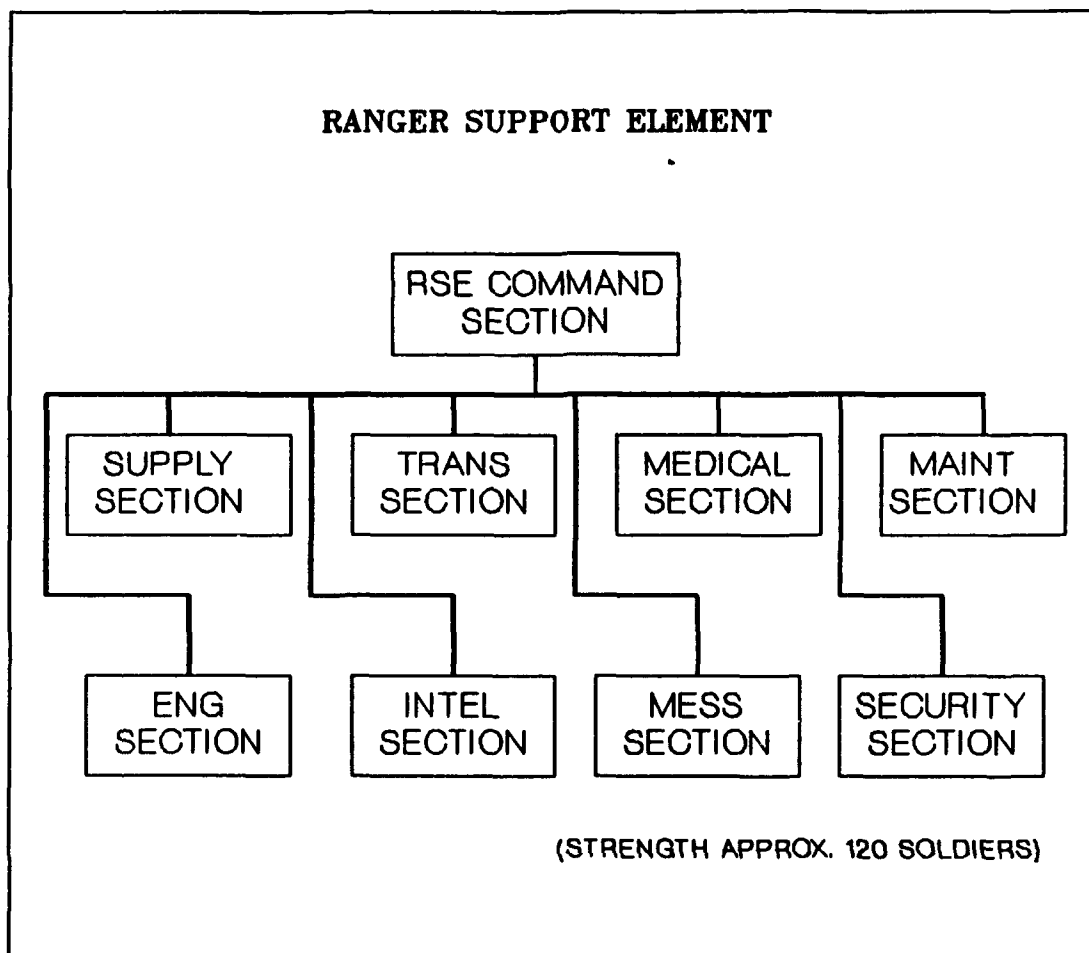


Figure 4-3 RSE Generic Organization

the ranger battalion to move directly to the objective area from CONUS, the RSE continues support of the ranger battalion until released by the theater commander, and is prepared to accept considerable augmentation assets if necessary. The RSE provides the following support:

- Furnishing meals that are either served by a supporting unit in an established facility or taken to the ranger battalion at an isolated location.

- Issuing supplies from existing stocks, or from contingency items stored for use by the ranger battalion.
- Transporting supplies, food, personnel, and equipment.
- Palletizing equipment and ammunition for air movement and airdrop.
- Rigging vehicles and equipment for airdrop.
- Refueling vehicles and equipment.
- Issuing barrier and construction material for building of rehearsal sites.
- Helping in the construction of rehearsal sites and targets.
- Securing, storing, moving, and issuing ammunition and other Class V items.
- Maintaining ranger weapons and equipment, to include communications equipment. This is normally done by maintenance contact teams.
- Setting up and operating the RSE emergency operations center.
- Securing the REMAB if it is in CONUS. [Ref. 17:p. 2-8]

4. 112th Special Operations Communication Battalion

The 112th Special Operations Communication Battalion (SOCB) provides communications support to all ARSOF. The 112th SOCB has the ability to install, operate, and maintain full communications with the unified commander, the ARSOF headquarters, subordinate commands, supported units, and host nation liaison. [Ref. 7:p. 9] The battalion accomplishes its support mission by providing the supported command the capability to communicate through the use of FM and/or HF radio and satellite communications. The SOCB is also capable

of providing direct support maintenance for all ARSOF communications equipment. One example of its mission capabilities was seen during Operation Just Cause. The battalion deployed a communications team to the headquarters of the 75th Ranger Regiment in order to augment the Regiment's existing communications capabilities. The 112th SOCB is comprised of a headquarters detachment and two signal companies.

C. THEATER ARMY SUPPORT OF ARSOF

1. The Doctrine

The doctrine presented in this section is currently in draft form and is continuing to evolve. The U.S. Army Logistics Center and the J.F.K. Special Warfare Center and School are working together to develop a doctrine which will fully integrate ARSOF support into conventional theater army support doctrine.

The developing doctrine can be divided into two components: 1) ARSOF support in a developed theater and, 2) ARSOF support in an undeveloped theater or undeveloped periphery of a developed theater. The logistical operations within the latter component are considered contingency support operations. The common bond between these two components is that each ARSOF operation, regardless of the theater's development, requires some combination of developed theater and contingency support.

The primary planning and coordinating organization at the TA level for ARSOF is the theater army special operations support command (TASOSC). The TASOSC's have evolved from the original concept of the theater army special operations command (TASOC). Though not all are fully established, a TASOSC will be organized in each of the five unified commands.

a. Support Doctrine for ARSOF in Developed Theaters

The logistical support of ARSOF in a developed theater is the same as conventional forces support. A developed theater is defined as:

...a theater in which the Echelons Above Corps (EAC) logistic structures are in place and capable of supporting and sustaining units assigned or attached to the theater command. [Ref. 2]

In addition, prepositioned war reserve materiel stocks (PWRMS) and operational project stocks are in place and host nation support (HNS) agreements exist. At the time of this research, the Central Command (CENTCOM) theater is the nearest of the five theaters to being fully developed in terms of its theater support structure.

The ARSOF task force commander and his staff coordinate all their requirements through the TASOSC. The TASOSC director of logistics (DOL) is the primary link between the ARSOF commander and the established theater army support structure.

The exception to the procedures stated above is the support of special operations (SOF) peculiar equipment. SOF-peculiar equipment usually involves very high technology, and in many cases is mission specific. These items must be intensively managed and must be identified to the TA support structure as SOF-peculiar. ARSOF commanders must arrange for procedures that will ensure that the items are supported. This is done through the use of the support contingency principles which are discussed in the next section.

b. Support Doctrine for ARSOF in Undeveloped Theaters and the Undeveloped Periphery of Developed Theaters

Army special operations forces support procedures in undeveloped theaters and the undeveloped peripheries of developed theaters are quite different from the developed TA support doctrinal component. An undeveloped theater is defined as a theater where the logistics base is not fully established. For the majority of situations, except general war, all five theaters are undeveloped in terms of their support structure (the current exception is CENTCOM). Under peacetime conditions the theater support structures are provided minimum personnel and equipment to maintain their peacetime mission. Consequently, the theater support structures are undeveloped.

The periphery of a developed theater is defined as an area of operations of a developed theater which extends beyond the capabilities of established TA support structure.

The peripheries are more prone to low-intensity conflict during mid- to high-intensity conflicts within the theater. An example would be if the European theater erupted into a major conflict between NATO and the Soviet Union. Northern and central Europe would be established as a developed theater while the southern littorals and north Africa would remain undeveloped. In this case, the southern flank of the European Command would be an undeveloped periphery.

For long duration contingency operations conducted in an undeveloped theater or in the undeveloped periphery of developed theaters there is no significant theater sustainment base. "These SO are best considered contingency operations, even if they occur during protracted conflict." [Ref. 2] When ARSOF units are deployed into these conditions they must deploy enough resources to allow them to accomplish their mission until theater support structures are established or arrangements for HNS are made.

ARSOF support planners must apply their knowledge of conventional logistics operations to meet the specific needs of the mission or scenario. The planners have numerous options from which to choose when planning and coordinating support for ARSOF missions. Figure 4-4 [Ref. 2] shows the support options available to ARSOF logistics planners. In addition, ARSOF support planners must apply as many of the support contingency principles as are practical when supporting ARSOF in undeveloped theater situations. Table

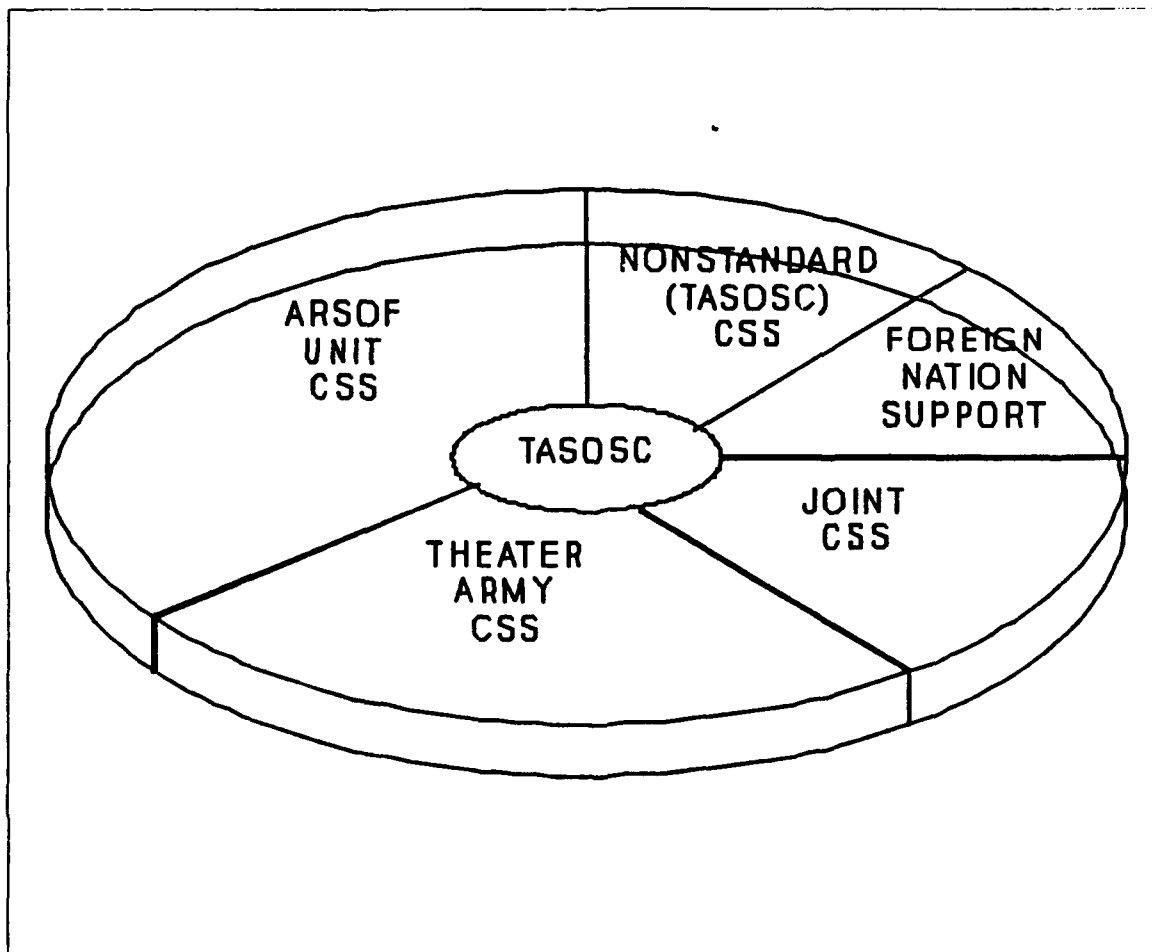


Figure 4-4 ARSOF CSS Support Options

4-1 [Ref. 2] lists the support contingency principles. The importance and application of each principle varies and is dependent on the specific contingency operation.

The command and control structure established for the contingency operations will have a direct impact on the procedures which are followed in order to obtain logistical support for ARSOF. The majority of special operations will involve the establishment of a joint special operations task

TABLE 4-1

SUPPORT CONTINGENCY PRINCIPLES

Maximize use of host nation support, to include local and third country supplies, services, and other resources.

Maximize use of existing facilities.

Limit CSS requirements to mission essential.

Minimize handling of supplies.

Concentrate maintenance efforts on returning major end items to service.

Rely on air lines of communication for resupply.

Maximize use of accompanying supplies, pre-positioned stocks, and preplanned resupply packages.

Identify to the TA as early as possible those items that require operational readiness floats or other special logistics arrangements.

force (JSOTF). When a JSOTF is established, the JSOTF commander may provide the direct support, if available to him from his service component, or he may authorize ARSOF units to request support through their parent units or directly from the CONUS wholesale logistics system.

Logistical support of ARSOF in an undeveloped theater and the undeveloped periphery of a developed theater will vary depending on the mission and scenario. A bare base support system may be established to provide support from CONUS, from within the theater, from afloat amphibious ships

or mobile sea bases, or from a third country. The bare base method involves the establishment of a temporary support structure which is capable of supporting a specific contingency operation. Under these conditions the TASOSC remains the primary coordinating headquarters for ARSOF logistical requirements. In a developed theater the TASOSC coordinates with the TA support structure only. The difference in undeveloped theaters and the undeveloped periphery of developed theaters is that the TASOSC may coordinate with joint commands, HNS, or directly with ARSOF support units in order to provide the required support.

V. SUPPORT COMMAND AND CONTROL ALTERNATIVES

This chapter describes three alternative ARSOF support command and control structures. In addition, the light infantry division (LID) support command and control structure is discussed as a comparison alternative. The chapter is designed to explain the support command and control alternatives which will be used in Chapter VI for the comparative analysis. The alternatives are explained in general support concept terms. It is not the intent of this chapter to educate the reader on the specifics of providing direct support to combat units. The intent of this chapter is to provide the reader with the general support concepts used under each alternative.

The ARSOF support alternatives are developed to provide support to the baseline ARSOTF organization which was introduced in Chapter I, Figure 1-3, Configuration B. The three support alternatives discussed below are organized to support the ARSOTF conducting a contingency operation at the Joint Readiness Training Center (JRTC), in Fort Chaffee, AK. The light infantry division support structure comparison alternative is organized to support a light infantry brigade task force conducting a similar contingency operation at the JRTC. The ARSOTF and light infantry brigade task force exercises are explained in Section A below.

Section B discusses the four alternative command and control support structures. The types of units and support structures involved in alternatives 1 and 4 have been exercised at the JRTC. Alternatives 2 and 3 are postulated notional structures based on alternative one's structure.

Alternative 1 is the baseline support force structure described in Chapter I. Alternative 2 is the force support structure, described in Chapter II, that is being proposed by the U.S. Army J.F.K. Special Operations Warfare Center and School [Ref. 4] and the U.S. Army Infantry Center [Ref. 5]. Alternative 3 is the author's proposal to consolidate the ARSOF support command and control structure by creating a Special Operations Support Command (SOSCOM). Alternative 4, the infantry division (light) support structure, is provided as the comparison alternative.

A. JOINT READINESS TRAINING CENTER SCENARIO

This section explains similarities and differences between the ARSOTF JRTC exercise conducted in April 1989 and the 7th Infantry Division (Light) (7th ID(L)) brigade task force JRTC exercise conducted in October 1990. Table 5-1 is a summary of the similarities and differences. The JRTC is designed to train and evaluate units which conduct low-intensity and special operations. The JRTC training scenario requires a unit to deploy on short notice (within an 18 hour period) in support of a five to seven day contingency

operation in the notional small island country of Cortina. Cortina is located in an undeveloped theater and the U.S. logistical structure within the area of operation is limited to the deploying unit's organizational and deployable direct support assets.

TABLE 5-1

SIMILARITIES AND DIFFERENCES OF JRTC EXERCISES

<p>Similarities</p> <p>7th ID(L) and ARSOF task force:</p> <ul style="list-style-type: none"> * Deploy on short notice in support of a small island contingency operation in an undeveloped theater. * Air lines of communication are used on emergency basis only. * 5-7 day duration with multiple missions.
<p>Differences</p> <p>7th ID(L) task force:</p> <ul style="list-style-type: none"> * No theater support structure is available. * Deployed organic functional direct support units. * Deployed strength: combat & CS forces = 1800 <ul style="list-style-type: none"> CSS forces = 200 total force = 2000 <p>ARSOTF:</p> <ul style="list-style-type: none"> * Limited area support group support is available. * Host nation support is available. * Deployed 'ad-hoc' direct support CSS units. * Deployed strength: combat & CS forces = 1100 <ul style="list-style-type: none"> CSS forces = 200 total force = 1300

1. 7th Infantry Division (Light)

The 7th Infantry Division (Light) (7th ID(L)) deployed a brigade task force from Fort Ord, CA to JRTC in October 1990 [Ref. 19]. The combat forces portion of the task force consisted of a light infantry brigade headquarters, a light infantry maneuver brigade, a field artillery battery, and an air defense artillery company. The brigade task force was also augmented with combat support (CS) units which consisted of an engineer company, a military police platoon, a military intelligence platoon, and a signal platoon. The division also deployed a forward area support team (FAST) from the division support command (DISCOM). The FAST was comprised of a supply and services company, a maintenance company, and a medical company. The DISCOM forward area support coordinator (FASCO) received operational control of the FAST prior to the exercise planning phase and maintained control of it throughout the exercise.

The task force total deployed strength was approximately 2000 soldiers [Ref. 18]. The combat and combat support (CS) forces strength was approximately 1800, while the CSS forces, the DISCOM FAST, strength was approximately 200. The DISCOM FAST was designed to support the combat units for seven to ten days.

The training scenario limited the use of air lines of communication (ALOC) to emergencies only. The task force support requirements were fulfilled in line with specific

"rules" for logistical support. The rules were in line with theater army support doctrine for conventional forces conducting contingency operations.

2. Army Special Operations Task Force

The deployment of the Army special operations task force (ARSOTF) to JRTC in April 1989 provided significant logistical challenges to the deploying task force and the JRTC staff [Ref. 20]. The ARSOTF was configured as explained in Figure 1-3, configuration B. The ARSOTF total strength was approximately 1300 [Ref. 20]. The combat and combat support (CS) force strength was approximately 1100, while the CSS force strength was approximately 200. The ARSOTF was comprised of a ranger battalion and the ranger regimental headquarters, a civil affairs and psychological operations team, and a special forces detachment. The Ranger Regimental commander was designated the ARSOTF commander and was responsible for providing support to the task force.

The ARSOTF deployed units from Fort Bragg, NC (528th SOSB, a civil affairs team, and a psychological operations team), Fort Benning, GA (Headquarters Ranger Regiment) and Fort Lewis (1st SGF, 2d Ranger Battalion, and the RSE).

The supporting units included an "ad-hoc" deployed element of the ranger support element (RSE) and a portion of the 528th SOSB. The RSE portion consisted of direct support CS and CSS units. The RSE CS consisted of engineer, security, counter-intelligence, and signal support. The RSE

CSS units consisted of a supply and services section, a small arms and wheeled vehicle maintenance section, and a motor transport section. The 528th SOSB portion consisted of CSS units which included a motor transport section, a small arms and wheeled vehicle maintenance section, a mess section, and a medical team. Because the exercise extended beyond the five day period that organic support resources of the deployed units could cover, the JRTC staff had to develop new rules and new logistical concepts for the ARSOTF. The new rules and concepts included the establishment of an area support group (ASG) staff on Cortina and the allowance for the ARSOTF to buy goods and services from the local economy (contracting for host nation support).

B. SUPPORT COMMAND AND CONTROL ALTERNATIVES

This section describes three command and control alternatives for support for both CONUS based ARSOF and an ARSOTF deployed in support of a contingency operation. Each alternative is divided into a CONUS based support structure discussion and a deployed support structure discussion. The ARSOTF contingency operation scenario used throughout is as described in Section A above. The fourth alternative is included as a comparison alternative. The fourth alternative explains the support command and control structure for the 7th ID(L) in CONUS and deployed in support of the same contingency operation as described above. Each alternative

lists the support organization(s) which provide direct support for supply and services (S/S), ammunition support (CLV), maintenance (small arms and wheeled vehicle), transportation, and medical treatment.

1. Alternative 1: Baseline Structure

This alternative is based on the current ARSOF support structure. The baseline units were explained in Chapter I. Table 5-1.1 and Table 5-1.2 summarize the following discussion on alternative 1.

TABLE 5-1.1

ALTERNATIVE 1: CONUS-BASED SUPPORT COMMANDS

Unit SPT'D	S/S (1)	CLV (2)	MAINT	TRANS	MED
HQ, RGR RGT	36th ENG		36th ENG	36th ENG	36th ENG
1st BN, RGR	260th QM		260th QM	260th QM	260th QM
2d BN, RGR	80th ORD		80th ORD	80th ORD	80th ORD
3d BN, RGR	36th ENG		36th ENG	36th ENG	36th ENG
SFG	MMD/SOSB		-----	- MMD/SOSB	-----
POG	SOSB		SOSB	SOSB	SOSB
CAB	SOSB		SOSB	SOSB	SOSB
SOCB	SOSB		SOSB	SOSB	SOSB
NOTES: (1) Supply and Services. (2) Training ammunition (CLV) is in all cases provided by the local installation ammunition supply point.					

TABLE 5-1.2

ALTERNATIVE 1: DEPLOYED ARSOTF SUPPORT STRUCTURE

Unit SPT'D	S/S	CLV(1)	MAINT	TRANS	MED
ARSOTF: HQ, RGR RGT RGR BN SF TM CA TM POG TM	-----		RSE/SOSB (2)	-----	
NOTES: (1) CLV support was received from the general support ammunition company within the theater or from CONUS. (2) Provides all DS for ARSOTF, less CLV.					

a. CONUS Support Structure

Table 5-1.1 lists the major functional support commands. The CONUS-based ranger units are provided direct combat support (CS) and combat service support (CSS) from their respective Ranger Support Element (RSE). The RSE supporting the 1st Ranger Battalion, located at Hunter Army Airfield (HAAF), GA, is organized under the 260th Quartermaster Battalion (260th QM). The RSE supporting the 2d Ranger Battalion, located at Fort Lewis, WA, is organized under the 80th Ordnance Battalion (80th ORD). And the RSE supporting the Ranger Regimental Headquarters and the 3d Ranger Battalion, located at Fort Benning, GA, is organized under the 36th Engineer Group (36th ENG). Each RSE is comprised of different FORSCOM direct support CS and CSS

units located at each installation. The RSEs, when formed, are organized with the following units and provide the listed support:

<u>FUNCTIONAL AREA</u>	<u>HAAF</u>	<u>FT LEWIS</u>	<u>FT BENNING</u>
------------------------	-------------	-----------------	-------------------

Combat Service Support:

Command	260th QM	80th ORD	36th ENG
Supply	260th QM	80th ORD	36th ENG
Maintenance	632d MAINT	80th ORD	36th ENG
Medical	260th QM	62d MED	34th MED
Transportation	260th QM	80th ORD	36th ENG

Combat Support:

Counter Intel	124th MI	I CORPS	Unidentified
Signal	260th QM	9th SIG	36th ENG
Security	Installation	9th ID	Installation
Engineer	92d ENG	864th ENG	36th ENG

The five Special Forces Groups (SFG) are also geographically separated and receive their CONUS support from an installation materiel management division (MMD) or from the 528th SOSB. The following list identifies each SFG, their location, and from what organization they receive their CONUS support:

<u>SFG COMMAND</u>	<u>LOCATION</u>	<u>SUPPORTING UNIT</u>
1st SFG	FT LEWIS, WA	MMD
3d SFG	FT BRAGG, NC	528th SOSB
5th SFG	FT CAMPBELL, KY	MMD
7th SFG	FT BRAGG, NC	528th SOSB
10th SFG	FT DEVENS, MA	MMD

The MMDs coordinate for direct support to fill the requirements received from their respective SFGs. The requirements are filled through the use of installation table of distribution and allowances (TDA) assets and TOE assets. The 528th SOSB provides all direct support for the two SFGs located at Fort Bragg, NC.

The final three components of the ARSOF, the civil affairs battalion, the psychological operations group, and the special operations communication battalion, are located at Fort Bragg, NC. Consequently, they receive their direct support from the 528th SOSB.

b. Deployed ARSOTF Support Structure

The army special operations task force (ARSOTF) configuration introduced in Chapter I, configuration B, is the ARSOTF which will be used in the analysis for all three alternatives. The configuration includes elements from all of the ARSOF units introduced in Chapter I and described in Chapter IV. The ARSOTF organized for the JRTC contingency operation exercise described in Section A above is the same as explained in Chapter I. Table 5-1.2 is a summary of the

following discussion on the command and control structure which supported the deployed ARSOTF.

The support structure for the ARSOTF JRTC exercise in April 1989 included elements of the 2d Ranger Battalion's RSE, the 80th Ordnance Battalion from Fort Lewis, WA and the 528th SOSB from Fort Bragg, NC. The support organization provided direct support for supply and services, maintenance (small arms and wheeled vehicle), transportation, and medical. Ammunition resupply support (CLV) was provided by the theater combat service support asset. The ARSOTF support organization was as follows:

<u>FUNCTIONAL AREA</u>	<u>PROVIDING UNIT</u>
Command	80th ORD
Supply and services	80th ORD and 528th SOSB
Maintenance	80th ORD and 528th SOSB
Transportation	80th ORD and 528th SOSB
Medical	528th SOSB

2. Alternative 2: SWC and USAIC Proposal

The following alternative is based on the proposals by the J.F.K. Special Warfare Center and School (SWC) [Ref. 4] and the U.S. Army Infantry Center (USAIC) [Ref. 5] which were discussed in the literature review section of Chapter II. The proposals include the expansion of the 528th SOSB organization and the creation of a Ranger Support Battalion (RSB).

a. CONUS Support Structure

Table 5-2.1 summarizes the following discussion.

Under this alternative, the proposal by the USAIC [Ref. 4] has the CONUS-based ranger units being provided direct support from the Ranger Support Battalion (RSB). The RSB headquarters and a forward support company (FSC) are co-located with the Ranger Regiment headquarters and the 3d Ranger Battalion at Fort Benning, GA. The 1st Ranger Battalion, located at Hunter Army Airfield (HAAF), GA, is supported by another forward support company from the RSB. Finally, the 2d Ranger Battalion, located at Fort Lewis, WA, is supported by the third forward support company from the RSB. Each RSB forward support company is identical to the other and is comprised of functional support units which provide direct support for supply and services, maintenance, transportation, and medical.

The special forces groups (SFGs), under the J.F.K. SWC proposal [Ref. 4], receive their CONUS support from the main support company (MSC) or from a forward area support company (FASC) from the special operations support unit (SOSU). The 3d and 7th SFGs, located at Fort Bragg, NC, would receive their direct support from the main support company of the SOSU which would be co-located with the SFGs and the SOSU headquarters at Fort Bragg, NC. The 1st SFG, Fort Lewis, WA, the 5th SFG, Fort Campbell, KY, and the 10th SFG, Fort Devens, MA receive their direct support from one of

TABLE 5-2.1

ALTERNATIVE 2: JFK SWC AND INFANTRY CENTER PROPOSAL, CONUS

Unit SPT'D	S/S(1)	CLV(2)	MAINT	TRANS	MED
HQ, RGR RGT	-----	RSB, FSC	-----		
1st BN, RGR	-----	RSB, FSC	-----		
2d BN, RGR	-----	RSB, FSC	-----		
3d BN, RGR	-----	RSB, FSC	-----		
SFG	-----	SOSU, MSC or FASC	-----		
POG	-----	SOSU, MSC	-----		
CAB	-----	SOSU, MSC	-----		
SOCB	-----	SOSU, MSC	-----		
NOTES: (1) Supply and Services. (2) Training ammunition (CLV) is provided by the local installation Ammunition Supply Point.					

the three forward area support companies which would be located on each respective installation. The main support company (MSC) and forward area support companies (FASC) would provide direct support for supply and services, transportation, and maintenance.

Finally, the civil affairs battalion, the psychological operations battalion, and the special operations communication battalion, all located at Fort

Bragg, NC, would also receive their support from the main support company of the SOSU.

b. Deployed Support Structure

The baseline ARSOTF, under this alternative, would be provided direct support from a support organization comprised of functional direct support units from the RSB and the SOSU. Table 5-2.2 provides a summary of this discussion. The actual deployed support force configuration would be dependent on the ARSOTF commander's guidance. Using the ARSOTF organization for the April 1989 JRTC exercise, the hypothesized support organization, using the proposed SOSU and RSB, would consist of the following:

<u>FUNCTIONAL AREA</u>	<u>PROVIDING UNIT</u>
Command	RSB HQ
Supply and services	RSB and SOSU
Maintenance	RSB and SOSU
Transportation	RSB and SOSU
Medical	SOSU

3. Alternative 3: SOSCOM Proposal

This alternative is based on the author's proposal to create a special operations support command (SOSCOM). The SOSCOM concept is described below followed by the alternative 3 hypothesized CONUS and deployed support structures.

a. Special Operations Support Command Concept

The proposal to formulate a special operations support command (SOSCOM) is focused toward: 1) streamlining

TABLE 5-2.2

ALTERNATIVE 2: JFK SWC AND INFANTRY CENTER
PROPOSAL, DEPLOYED

Unit SPT'D	S/S	CLV(1)	MAINT	TRANS	MED
ARSOTF HQ, RGR RGT RGR BN SF TM CA TM POG TM			----- RSB/SOSU -----		
NOTES: (1) CLV support received from the general support ammunition company within the theater or from CONUS.					

the ARSOF support command and control structure, for both CONUS and deployed ARSOF, by providing a single headquarters for the ARSOF direct support functional units; 2) reducing the personnel resources at the theater army level by replacing the five TASOSC's organization and personnel with liaison teams from the proposed SOSCOM headquarters; and 3) facilitating simple ARSOF support planning and communications channels through a centrally controlled planning node located at the SOSCOM headquarters. The proposed SOSCOM structure is modeled on an infantry division (light) DISCOM. Figure 5-1 shows a simplified comparison of the proposed SOSCOM concept with respect to the light infantry DISCOM.

The light infantry DISCOM acts as the division's central planning and coordinating organization for all

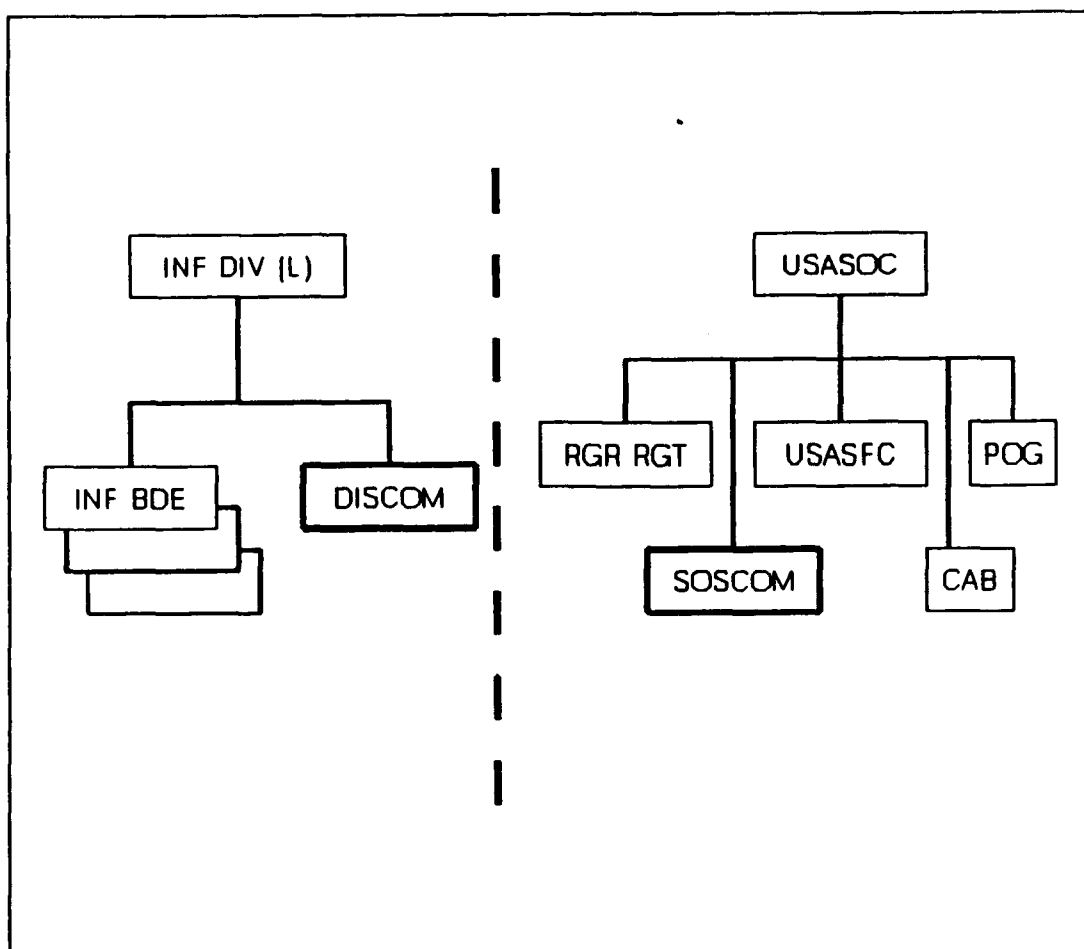


Figure 5-1 DISCOM-SOSCOM Comparison

support requirements. The SOSCOM would provide the same function for the U.S. Army Special Operations Command (USASOC). The RSB and the SOSU would become functional units within the SOSCOM. In addition, the materiel management center (MMC) would be removed from the proposed SOSU organization and placed under the direct control of the

SOSCOM in order to coordinated all supply and service requirements for the SOSCOM functional units.

Figure 5-2 shows the proposed SOSCOM organization and the functional units organized within the SOSCOM command. The approximate strength of the proposed SOSCOM is 1100 personnel. The RSB would continue to support the ranger battalions and the regimental headquarters through the forward support companies located at each respective installation. The SOSU would also continue to support the SFGs, civil affairs battalion, psychological operations group, and the special operations communications battalion with the main support and forward area support companies. The SOSCOM headquarters and MMC would be developed and given resources by using the theater army special operations support command (TASOSC) personnel and the 528th SOSB MMC personnel. The TASOSCs would be removed from the theaters and consolidated within the SOSCOM headquarters.

The proposed SOSCOM headquarters is shown in Figure 5-3. The SOSCOM headquarters organization would be similar to the headquarters section within a light infantry DISCOM. The administration section would operate the same as a DISCOM administration section by providing personnel and administrative support to the SOSCOM. The intelligence/operations section would include the following.

(1) The Intelligence Branch. The intelligence branch is responsible for the collection and dissemination of

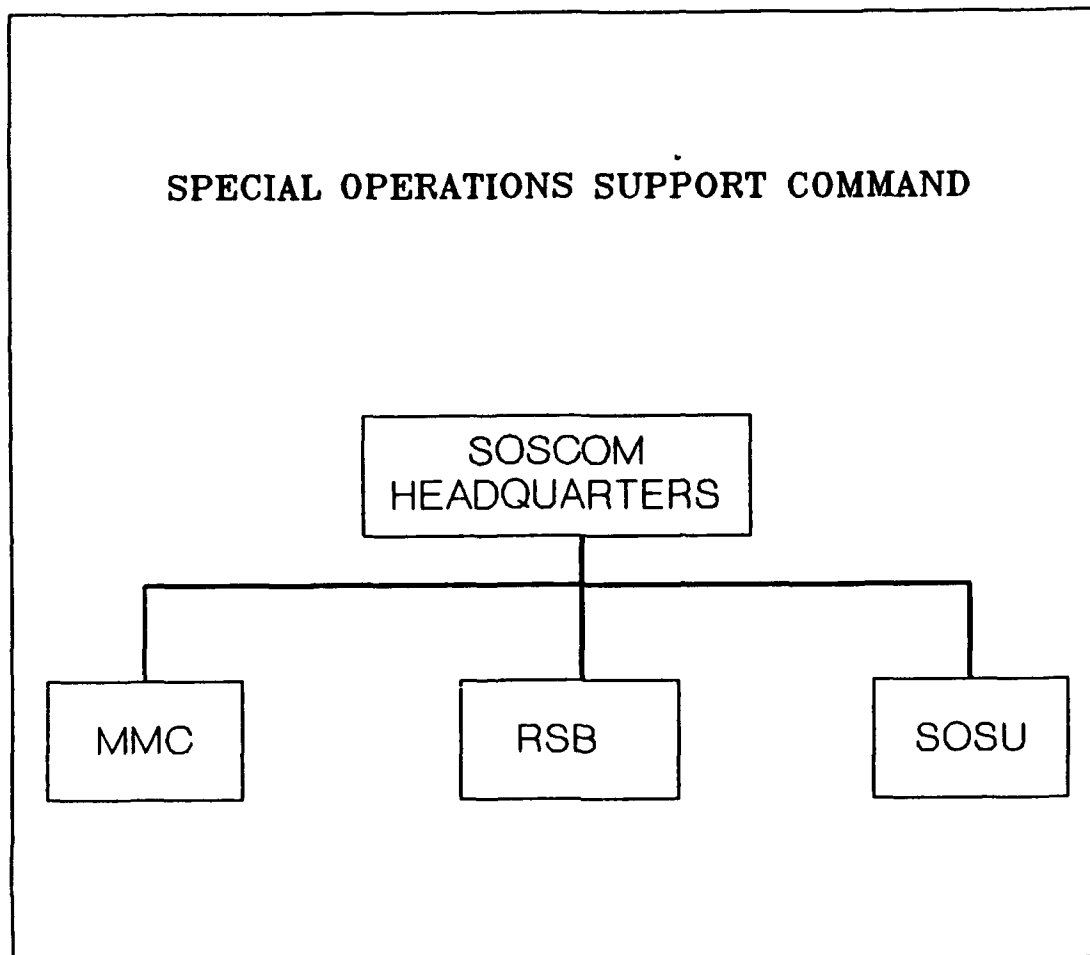


Figure 5-2 SOSCOM Organization

all mission oriented intelligence; the requisitioning and issuing of maps, and, in conjunction with the Civil Affairs Battalion, creating and maintaining an active world-wide logistics intelligence database.

(2) The Plans and Operations Branch. The plans and operations branch is responsible for all operational planning and mission taskings; establishes and maintains all operations plans (OPLANS).

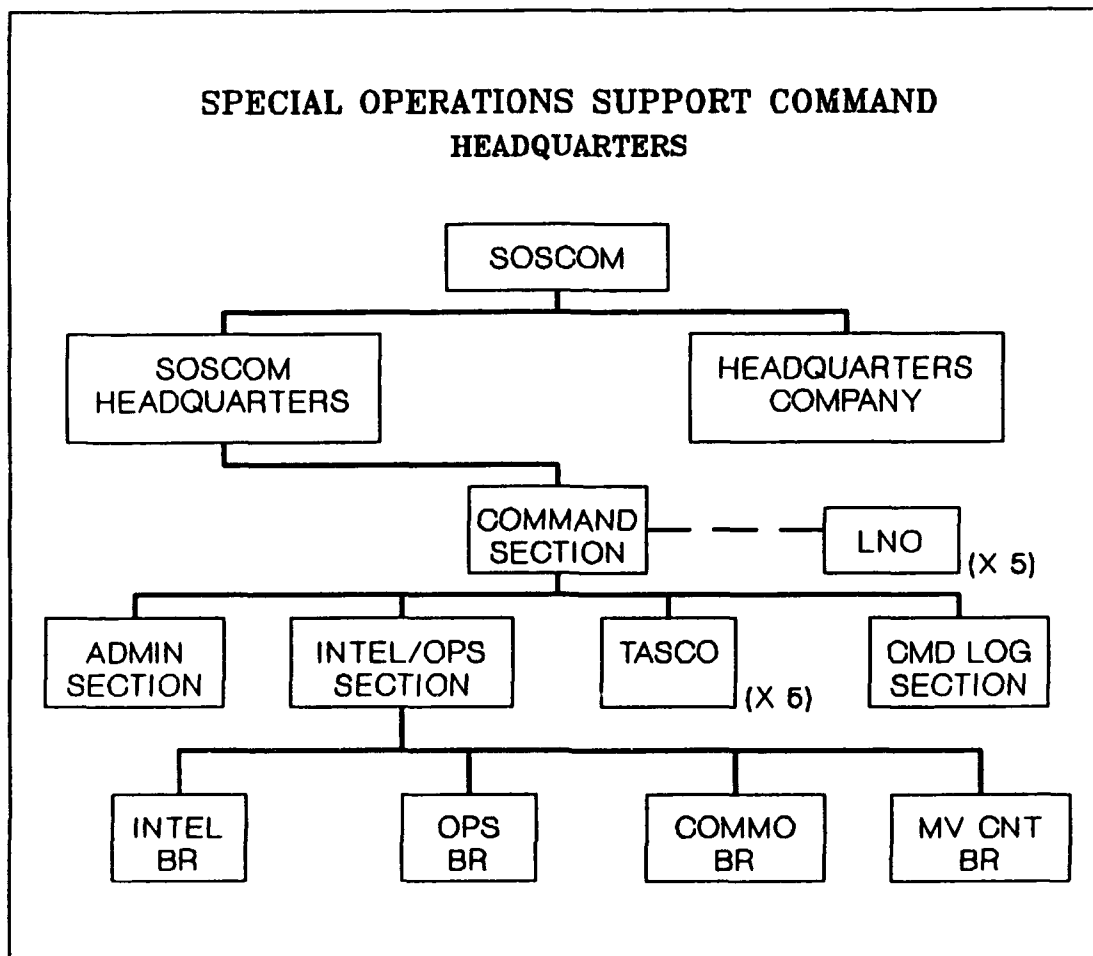


Figure 5-3 SOSCOM Headquarters Organization

(3) The Communications Branch. The communications branch is responsible for the coordination and management of all communications requirements for the headquarters.

(4) The Movements Control Branch. The movements control branch is responsible for the coordination and management of all transportation requirements for the headquarters and subordinate units.

The planning and coordination of ARSOF theater army support requirements would be accomplished through five liaison (LNO) teams which would be detached from the SOSCOM and located in each theater army command. The LNO teams would replace the TASOSC organization and provide the SOSCOM a central planning point within each theater. The next major functional sections within the SOSCOM headquarters would be five theater area support coordinators (TASCO), each with a specific theater responsibility. The TASCO would have a function similar to the forward area support coordinator (FASCO) of a light infantry DISCOM. The TASCO would receive operational control of the ARSOF support units (i.e., RSB and SOSU) supporting operations within his theater. The TASCO would be the interface between the TASOSC LNO team, the SOSCOM, and the ARSOTF.

Figure 5-4 shows the TASCO organization during an ARSOTF deployment. The RSB and SOSU functional units would form a forward area support team (FAST) which would be controlled by the TASCO. The FAST would be comprised of a RSB forward support company and a SOSU forward area support company and/or elements from the SOSU main support company during contingency operations. The TASCO would receive operational control of the FAST, and become the focal planning and coordinating node, during ARSOTF deployments.

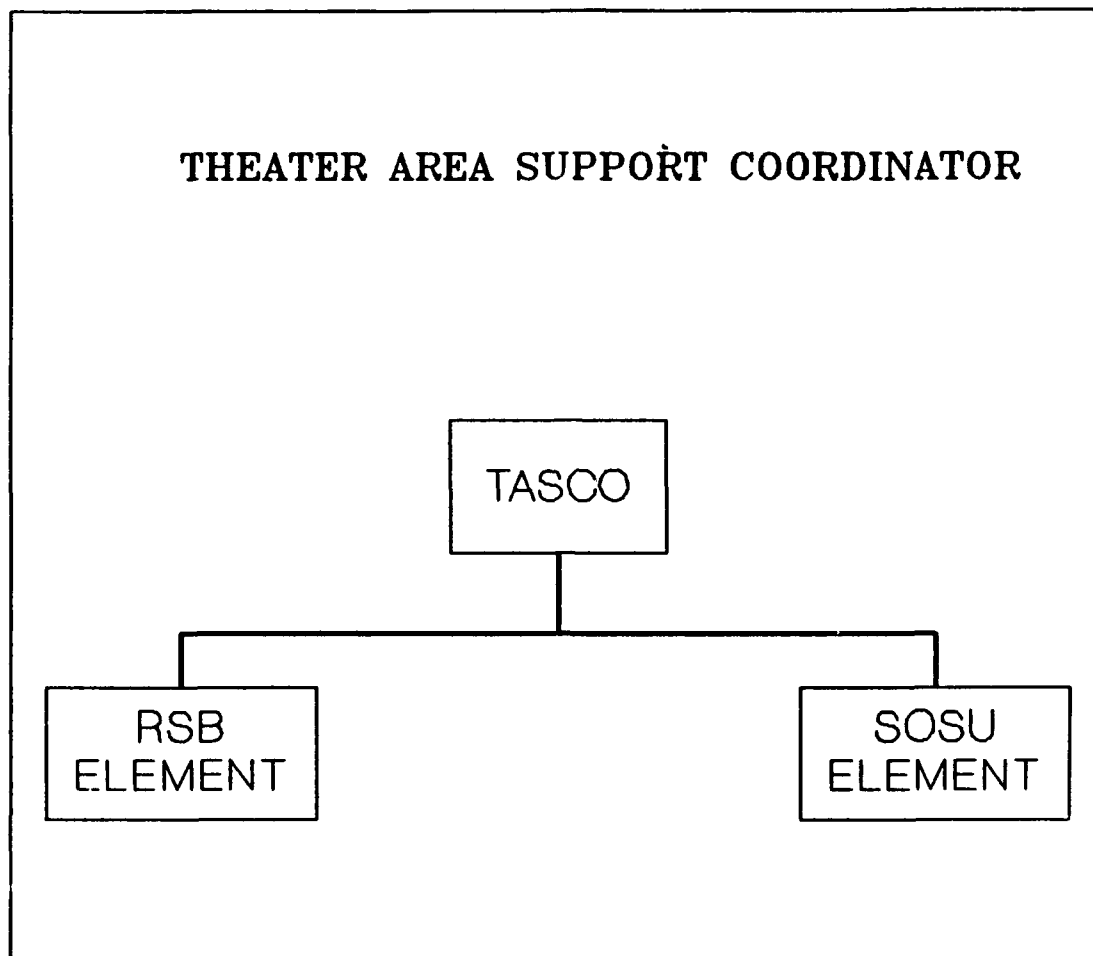


Figure 5-4 TASCO Organization

The final section within the SOSCOM headquarters would be the command logistics section. This section would be responsible for meeting the logistics needs of the SOSCOM headquarters.

b. CONUS Support Structure

Under the proposed SOSCOM, the CONUS support structure for ARSOF would be similar to that of the alternative 2 CONUS support structure. Table 5-3.1

summarizes the support structure for this alternative. The RSB would support its respective ranger battalions through forward support companies (FSC). The SOSU would support the respective SFGs, civil affairs battalion, psychological operations group, and special operations communication battalion with the forward area support companies (FASC) or the main support company (MSC).

TABLE 5-3.1

ALTERNATIVE 3: SOSCOM PROPOSAL, CONUS

Unit SPT'D	S/S (1)	CLV (2)	MAINT	TRANS	MED
HQ, RGR RGT	-----	RSB, FSC	-----		
1st BN, RGR	-----	RSB, FSC	-----		
2d BN, RGR	-----	RSB, FSC	-----		
3d BN, RGR	-----	RSB, FSC	-----		
SFG	-----	SOSU, MSC or FASC	-----		
POG	-----	SOSU, MSC	-----		
CAB	-----	SOSU, MSC	-----		
SOCB	-----	SOSU, MSC	-----		
NOTES: (1) Supply and Services. (2) Training ammunition (CLV) is provided by the local installation Ammunition Supply Point.					

c. Deployed Support Structure

The baseline ARSOTF, under the SOSCOM alternative, would be provided direct support from a forward area support team (FAST). Table 5-3.2 is a summary of the following discussion. The FAST would be under the operational control of its respective TASCOC. The TASCOC would be responsible for coordinating with the SOSCOM theater LNO and the ARSOTF when deploying the FAST into the theater in support of contingency operations. The FAST support organization is comprised of functional direct support units from the RSB and the SOSU. The composition of the direct support units within the FAST is similar to Alternative 2 support structure, deployed. The actual support force configuration would be dependent on the ARSOTF commander's guidance. Using the ARSOTF organization for the April 1989 JRTC exercise, the hypothesized support organization would consist of the following:

<u>FUNCTIONAL AREA</u>	<u>PROVIDING UNIT</u>
Command	FASCO
Supply and services	FAST
Maintenance	FAST
Transportation	FAST
Medical	FAST

TABLE 5-3.2

**ALTERNATIVE 2: JFK SWC AND INFANTRY CENTER
PROPOSAL, DEPLOYED**

Unit SPT'D	S/S	CLV(1)	MAINT	TRANS	MED
ARSOTF HQ, RGR RGT RGR BN SF TM CA TM POG TM			----- FASCO/FAST -----		
NOTES: (1) CLV support is received from the general support ammunition company within the theater or from CONUS.					

4. Alternative 4: 7th ID(L) DISCOM

This alternative is presented as a comparison alternative to the three previous ARSOTF support structure alternatives. The support structure presented below is based on the support structure of the 7th Infantry Division (Light) for both the CONUS support of one maneuver brigade and the deployed support of one maneuver brigade task force. The alternative structure for the deployed brigade task force is presented using the 7th ID(L) JRTC scenario described in Section A above. Table 5-4 summarizes the following discussion.

The support structure for the CONUS based maneuver brigade is comprised of units from within the DISCOM. The forward area support coordinator (FASCO) is the central

TABLE 5-4

ALTERNATIVE 4: 7TH ID(L) DISCOM

Unit SPT'D	S/S	CLV	MAINT	TRANS	MED
CONUS Maneuver BDE	supply company	supply company	maint company	trans platoon	med company
Deployed BDE TF	FAST	(1)	-----	FAST	-----
NOTES: (1) CLV support is received from the general support ammunition company within the theater or from CONUS.					

coordinating agency for filling the brigade's support requirements. The FASCO coordinates with the functional units within the DISCOM to provide the required support to the brigade. While in CONUS the functional support units are under the operational control of their parent organizations. The following list shows the functional area, the providing unit, and the parent organization which:

<u>FUNCTIONAL AREA</u>	<u>PROVIDING UNIT</u>	<u>PARENT ORG</u>
Supply	supply company	7th S&T BN
Maintenance	maint company	707th MAINT BN
Medical	medical company	7th MED BN
Transportation	trans platoon	7th S&T BN

The support structure which deploys in support of a maneuver brigade task force is comprised of the same functional units that provide support to the maneuver brigade

in CONUS. The functional units are consolidated under the forward area support team (FAST) and out from under their parent unit operational control. The FAST moves under the operational control of the FASCO for the duration of the operation. The FASCO is the central planning and coordinating agency for the brigade task force support requirements for the operation.

C. SUMMARY

The intent of this chapter was to provide the reader with the general support concepts used under each alternative. The chapter provided three alternative ARSOF direct support command and control structures. In addition, the light infantry division (LID) support command and control structure was discussed as a comparator alternative. The chapter was designed to explain the support command and control alternatives which will be used in Chapter VI for the comparative analysis. The alternatives were explained in general support concept terms. Table 5-5 is a summary of the four alternatives discussed in the chapter.

TABLE 5-5

SUMMARY OF ALTERNATIVES

Alternative	Combat Forces Supported	Supporting CSS Structure
Baseline	Geographically dispersed ARSOF: Ranger forces SFGs Civil affairs PSY OPS SOCB	RSEs MMD/528th 528th SOSB 528th SOSB 528th SOSB
CONUS		
Deployed	ARSOTF	RSE/528th SOSB
SWC & USAIC Proposals	Geographically dispersed ARSOF: Ranger forces SFGs Civil affairs PSY OPS SOCB	RSB SOSU SOSU SOSU SOSU
CONUS		
Deployed	ARSOTF	RSB/SOSU
SOSCOM Proposal	Geographically dispersed ARSOF: Ranger forces SFGs Civil affairs PSY OPS SOCB	RSB SOSU SOSU SOSU SOSU
CONUS		
Deployed	ARSOTF	TASCO
7th ID (L) DISCOM	Centrally located maneuver brigade	DISCOM (S&T BN, MAINT BN, MED BN)
CONUS		
Deployed	Brigade task force	FASCO

VI. COMPARATIVE ANALYSIS

This chapter will concentrate on comparing the support structures of the three ARSOF alternatives (alternatives 1, 2, and 3) to the light infantry division support structure (alternative 4) discussed in Chapter V. The comparison is focused at answering the research questions presented in Chapter I and restated below.

- Is a special operations support command (SOSCOM) required to manage all SOF CSS units?
- What would be the appropriate mission and organization of such a SOSCOM unit?

The basis for comparing the three ARSOF alternatives to the DISCOM is the similarity between the ARSOF and infantry division (light) missions (see Chapter V) and the similarities between the sizes of the forces requiring support.

The method used to conduct the analysis will focus on comparing and contrasting four measures of effectiveness (MOE) for a command and control support structure. The MOEs which will be used and are defined in Section A below are the combat-to-combat service support strength ratio ("tooth-to-tail"), the number of support planning nodes/channels, the proximity of the support planning nodes to each other, and the number of organic and nonorganic support units.

Section B of the chapter provides the comparative analysis of the four alternatives based on the MOEs defined

in Section A. The analysis will be conducted based on the two exercises conducted at the Joint Readiness Training Center (JRTC), Fort Chaffee, AK which was discussed in Section A of Chapter IV. Each of the four alternatives will be compared and contrasted within each stated measure. The purpose of the analysis is not to determine the optimal solution for an ARSOF command and control support structure, but to determine which of the three ARSOF support alternatives presented in Chapter IV is most comparable to the light infantry division support structure in terms of command and control. The premise for the determination is that the infantry division (light) command and control support structure is an established and accepted support structure. Consequently, we will assume that the ARSOF support structure alternative which most closely resembles the light infantry DISCOM structure, in terms of the MOEs for a command and control support structure, will provide appropriate command and control for ARSOF support units.

A. MEASURES OF EFFECTIVENESS FOR A COMMAND AND CONTROL SUPPORT STRUCTURE

This section defines the four measures for a command and control support structure which will be used in the comparative analysis of Section B. The measures are: 1) combat force-to-support force ratio, 2) number of support planning nodes/channels, 3) the proximity of the support

planning nodes to each other, and 4) number of organic and nonorganic support units.

1. Combat Force-to-Support Force Ratio

The combat force-to-support force ratio is defined as the gross number of support troops required to support a certain number of combat troops. This ratio is also known as the "tooth-to-tail" ratio. For the purpose of this analysis the ratio does not take into consideration the occupational specialty, the skill and training, or the rank structure of the support personnel. The ratio is computed by determining the gross number of support soldiers used to support a certain number of combat soldiers for a specific exercise. The conclusions drawn from the ratio will determine if the ARSOF alternatives are similar to the light infantry division alternative.

2. Number of Support Planning Nodes/Channels

The number of support planning nodes/channels is computed by totaling all the support communications channels and planning nodes used during the planning phase of the operation. The conclusion which can be drawn from this measure is that the greater the number of channels and nodes used during CSS planning the greater the chance for planning errors. Consequently, the smaller the number of planning nodes/channels the less chance for planning errors.

3. Proximity of Support Planning Nodes

This proximity factor is used to measure the distance between the support planning nodes prior to the start of the exercise. The measurement is based on the distance which separates the planning nodes identified in measure 2 above times the estimated relative volume of communication between the nodes. The estimated volume of communication is based on the author's two years of experience planning support for ARSOF operations. The reason for this measurement is to highlight the possible existence of barriers to communication which may adversely affect the support planning process and have a negative impact on mission support. The conclusion which can be drawn from this measure is that the greater the distance between planning nodes, the greater the chance for planning errors. Thus, the smaller the distance the fewer the planning errors.

4. Number of Organic and Nonorganic Support Units

The number of organic and nonorganic support units measurement is computed by totaling all the deployed support units which are organic to the deployed CSS command and control headquarters plus the support units which are not organic to the CSS command and control headquarters but are under the operational control of the CSS headquarters for the exercise only. The measurement is used to determine the number of support units which are assigned by a table of organization and equipment (TOE) under the command and

control of the deployed support command headquarters. Consequently, a determination can be made of the relationship that exists between the deployed support units and the support command and control headquarters.

If the deployed functional support units are organic to the deployed support headquarters and within the functional command of the deployed combat force, then the command and control relationship is likely to be better than if the deployed functional support units are not organic to the deployed support headquarters and not within the functional command of the deployed combat force. The basis for this assumption is that organic units tend to form habitual support relationships with the supported combat unit which are superior to the sporadic relationships which are formed between nonorganic units and the supported combat units.

B. COMPARATIVE ANALYSIS

1. "Tooth-to-Tail" Ratio

Due to the sensitive nature of actual unit end strengths, the figures presented in this section are approximations based on the research of the current literature.

a. Alternative 1: Baseline Force Structure

Table 6-1 is a summary of the following discussion.

TABLE 6-1

ALT 1 "TOOTH-TO-TAIL"

CONUS	23:1
DEPLOYED	5.5:1

approximately 1000 personnel [Ref 21]. The following list shows the breakout of the unit strengths:

Baseline ARSOF:

<u>UNIT</u>	<u>STRENGTH</u>
Ranger Regiment	2700
SFG	7000 (1400 X 5)
PSY OPS	1100
Civil Affairs	600
SOCB	<u>200</u>
	11,600

ARSOF support:

<u>UNIT</u>	<u>STRENGTH</u>
RSE	360 (120 X 3)
528th SOSB	150
	550

(1) CONUS-Based. The total CONUS-based baseline ARSOF is approximately 11600 personnel [Ref 1:pp. 85-88]. The total CONUS-based ARSOF support organizations have

(2) Deployed. The total strength of the baseline deployed ARSOTF is approximately 1100 personnel [Ref 20]. The total strength of the deployed ARSOTF support structure is approximately 200 personnel [Ref. 20]. The following list shows the breakout of the unit strengths:

Baseline ARSOTF:

<u>UNIT</u>	<u>STRENGTH</u>
Ranger Regiment	1000
SFG	50
PSY OPS	10
Civil Affairs	10
SOCB	<u>25</u>
	1095

ARSOF support:

<u>UNIT</u>	<u>STRENGTH</u>
RSE	120
528th SOSB	<u>80</u>
	200

b. Alternative 2: SWC and USAIC Proposal

Table 6-2 is a summary of the following discussion.

TABLE 6-2

ALT 2 "TOOTH-TO-TAIL"

CONUS	10:1
DEPLOYED	5.5:1

(1) CONUS. The total CONUS-based baseline ARSOF is approximately 11600 personnel [Ref. 1:pp. 85-88]. The total CONUS-based ARSOF support organizations as proposed by the J.F.K. SWC and the USAIC would contain approximately 1645 personnel [Refs. 4,5]. The following list shows the breakout of the unit strengths:

Baseline ARSOF:

<u>UNIT</u>	<u>STRENGTH</u>
Ranger Regiment	2700
SFG	7000 (1400 X 5)
PSY OPS	1100
Civil Affairs	600
SOCB	<u>200</u>
	11,600

ARSOF support:

<u>UNIT</u>	<u>STRENGTH</u>
RSB	400
SOSU	<u>750</u>
	1150

(2) Deployed. The total strength of the baseline deployed ARSOTF is approximately 1100 personnel [Ref. 20]. The total strength of the deployed ARSOTF support structure is approximately 200 personnel [Refs. 4,5]. The following list shows the breakout of the unit strengths:

Baseline ARSOTF:

<u>UNIT</u>	<u>STRENGTH</u>
Ranger Regiment	1000
SFG	50
PSY OPS	10
Civil Affairs	10
SOCB	<u>25</u>
	1095

ARSOF support:

<u>UNIT</u>	<u>STRENGTH</u>
RSE	120
SOSU	<u>80</u>
	200

c. Alternative 3: SOSCOM Proposal

Table 6-3 is a summary of the following discussion.

TABLE 6-3

ALT 3 "TOOTH-TO-TAIL"

CONUS	10.5:1
DEPLOYED	6:1

(1) CONUS. The total CONUS-based baseline ARSOF is approximately 11600 personnel [Ref 1:pp. 85-88]. The total CONUS-based ARSOF support organizations as proposed by the author contain approximately 1100 personnel. The following list shows the breakout of the unit strengths:

Baseline ARSOF:

<u>UNIT</u>	<u>STRENGTH</u>
Ranger Regiment	2700
SFG	7000 (1400 X 5)
PSY OPS	1100
Civil Affairs	600
SOCB	<u>200</u>
	11,600

ARSOF support:

<u>UNIT</u>	<u>STRENGTH</u>
SOSCOM	1100

(2) Deployed. The total strength of the baseline deployed ARSOTF is approximately 1100 personnel

[Ref. 20]. The total strength of the deployed ARSOTF SOSCOM support structure, the FAST, is approximately 200 personnel. The following list shows the breakout of the unit strengths:

Baseline ARSOTF:

<u>UNIT</u>	<u>STRENGTH</u>
Ranger Regiment	1000
SFG	50
PSY OPS	10
Civil Affairs	10
SOCB	<u>25</u>
	1095

ARSOF support:

<u>UNIT</u>	<u>STRENGTH</u>
TASCO, FAST	185

d. Alternative 4: 7th ID(L) DISCOM

Table 6-4 is a summary of the following discussion.

TABLE 6-4

ALT 4 "TOOTH-TO-TAIL"

CONUS	10:1
DEPLOYED	9:1

(1) CONUS. The total CONUS-based maneuver brigade contain approximately 3000 personnel [Ref. 19]. The total CONUS-based maneuver brigade support organizations, from the DISCOM, is approximately 200 personnel [Ref. 19].

The following list shows the breakout of the unit strengths:

Combat Force:

<u>UNIT</u>	<u>STRENGTH</u>
Maneuver Brigade	3000

Support:

<u>UNIT</u>	<u>STRENGTH</u>
DISCOM	300

(2) Deployed. The total strength of the deployed brigade task force is approximately 1800 personnel [Ref. 19]. The total strength of the deployed brigade support structure, the FAST, is approximately 200 personnel [Ref. 19]. The following list shows the breakout of the unit strengths:

Brigade Task Force:

<u>UNIT</u>	<u>STRENGTH</u>
Maneuver battalion and divisional round-out units	1800

Support:

<u>UNIT</u>	<u>STRENGTH</u>
FASCO, FAST	200

2. Number of Support Planning Nodes/Channels

a. Alternative 1: Baseline ARSOTF Deployed

Figure 6-1 shows the support planning nodes and channels for the support of the baseline ARSOTF. Table 6-5 summarizes the number of planning nodes and channels.

Planning Nodes/Channels: Baseline

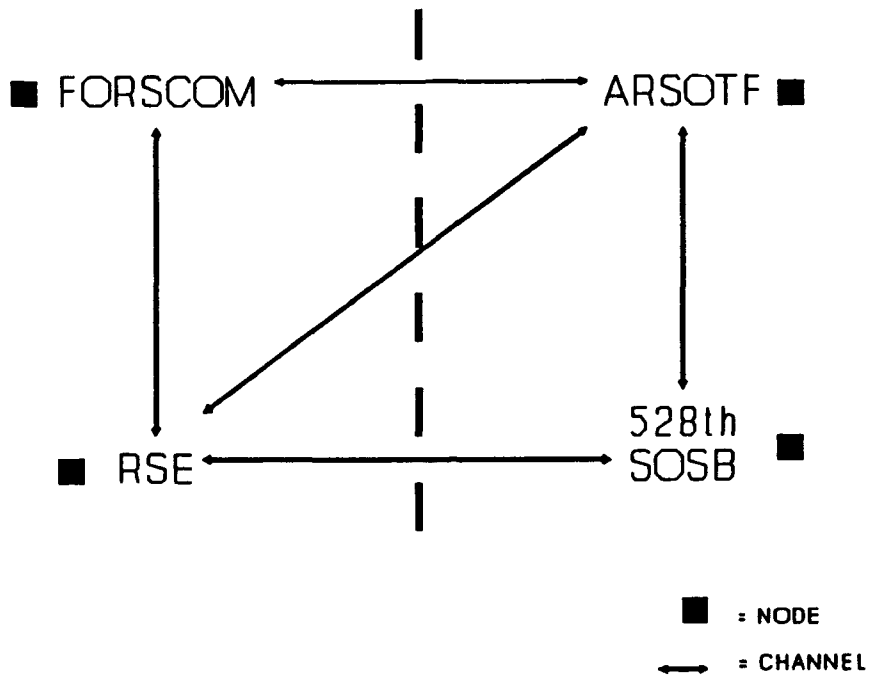


Figure 6-1 ALT 1

TABLE 6-5

ALTERNATIVE 1

Nodes = 4
Channels = 5

b. Alternative 2: SWC and USAIC Proposal, Deployed

Figure 6-2 shows the support planning nodes and channels for the support of alternative 2, the J.F.K. SWC and USAIC proposal. Table 6-6 summarizes the number of planning nodes and channels.

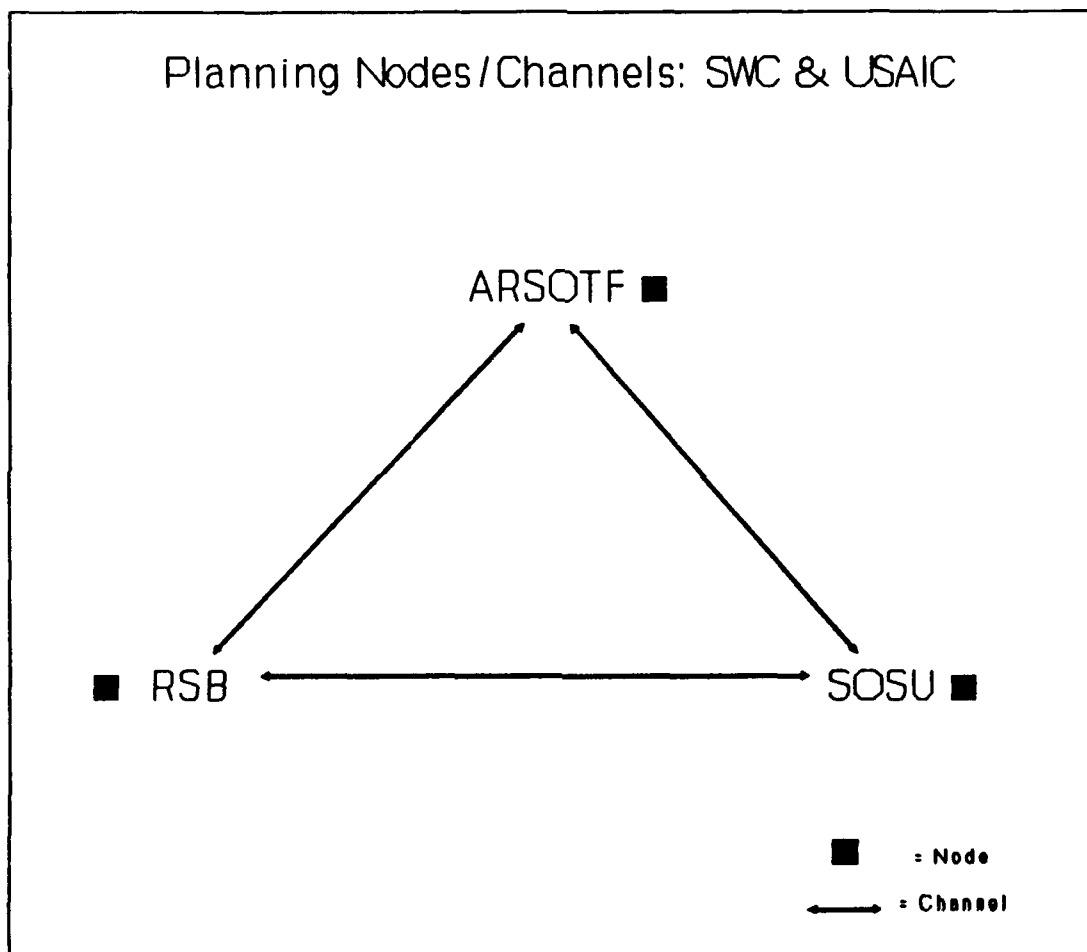


Figure 6-2 ALT 2

TABLE 6-6

ALTERNATIVE 2

Nodes = 3
Channels = 3

c. Alternative 3: SOSCOM Proposal, Deployed

Figure 6-3 shows the support planning nodes and channels for the support of alternative 3, the SOSCOM command and control structure. Table 6-7 summarizes the number of planning nodes and channels.

Planning Nodes/Channels: SOSCOM

ARSOTF ■



SOSCOM ■
(TASCO)



= Node



= Channel

Figure 6-3 ALT 3

TABLE 6-7

ALTERNATIVE 3

Nodes = 2

Channels = 1

d. Alternative 4: 7th ID(L) DISCOM, Deployed

Figure 6-4 shows the support planning nodes and channels for the support of alternative 4, the 7th ID(L) DISCOM structure. Table 6-8 summarizes the number of planning nodes and channels.

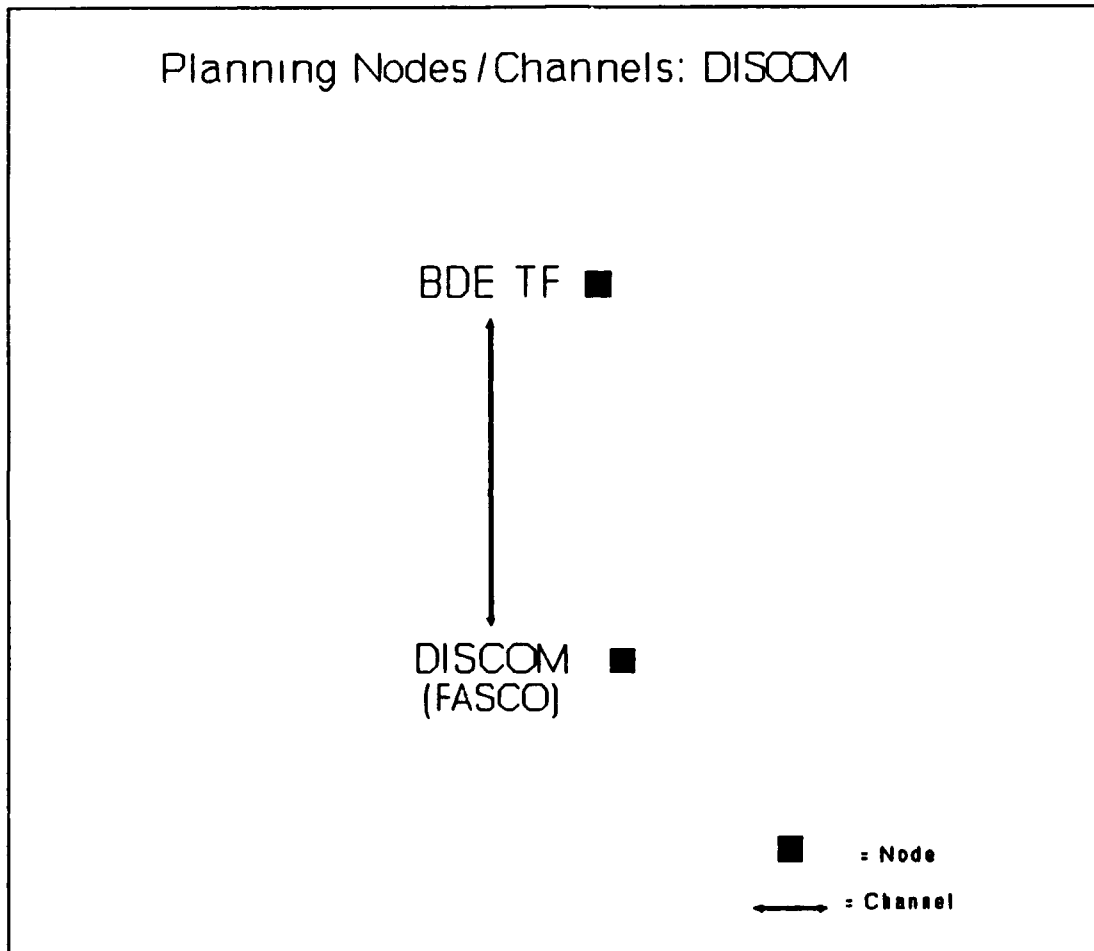


Figure 6-4 ALT 4

TABLE 6-8

ALTERNATIVE 4

Nodes = 2
Channels = 1

3. Proximity of Support Planning Nodes

a. Alternative 1: Baseline ARSOTF Deployed

The distance between the support planning nodes under alternative 1 are summarized in Table 6-9. The locations of each support planning node are shown in Figure 6-5.

TABLE 6-9

ALT 1 SEPARATION OF NODES

Planning Nodes	Separation	Volume of Comm. % per year
ARSOTF - FORSCOM	150 mi	21
ARSOTF - SOSB	400 mi	9
ARSOTF - RSE	2500 mi	29
FORSCOM - RSE	2 mi	32
RSE - SOSB	3000 mi	9
FORSCOM - SOSB	NOT USED	0
Weighted AVG Dist.	1063.1 mi	100

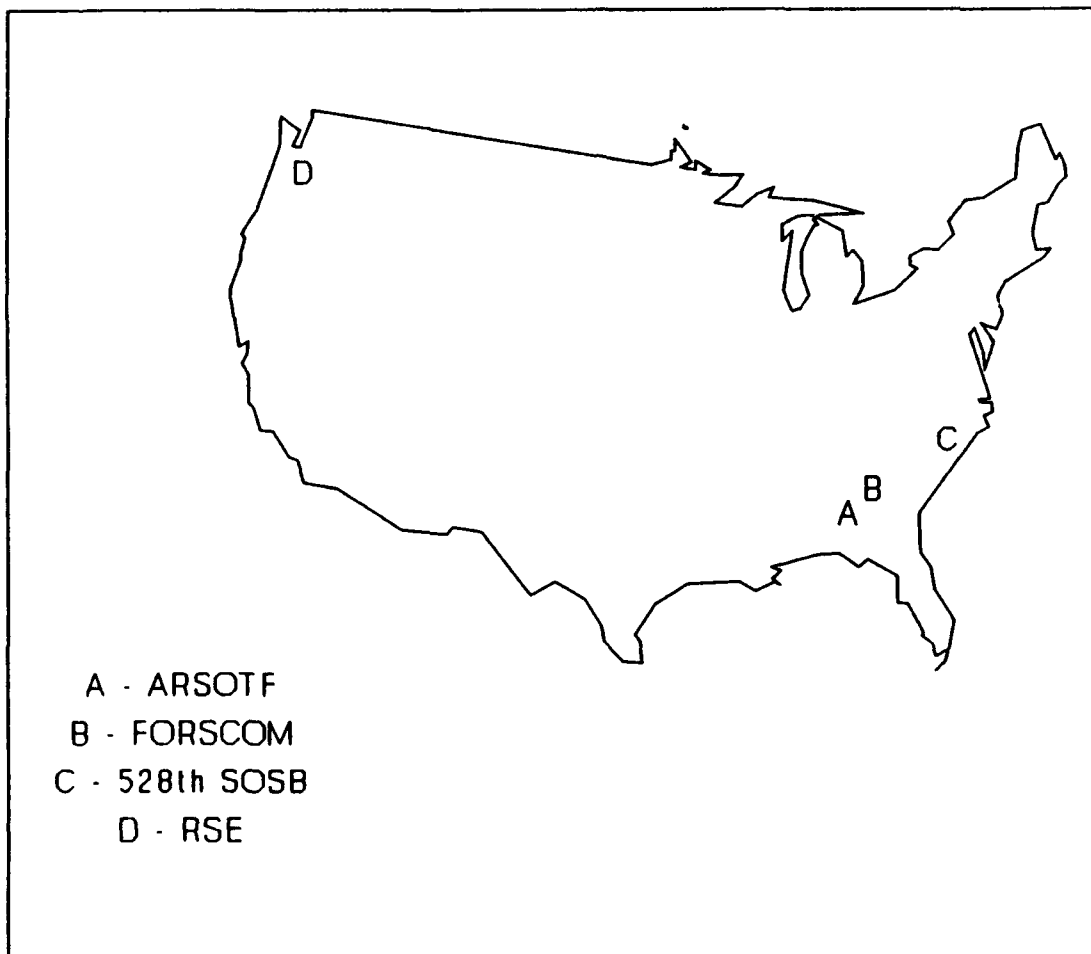


Figure 6-5 Alternative 1 Planning Node Locations

b. Alternative 2: SWC and USAIC Proposal, Deployed

The distance between the support planning nodes under alternative 2 are summarized in Table 6-10. The locations of each support planning node are shown in Figure 6-6.

TABLE 6-10

ALT 2 SEPARATION OF NODES

Planning Nodes	Separation	Volume of Comm. % per year
ARSOTF - SOSU	400 mi	20
ARSOTF - RSB	2 mi	50
RSB - SOSU	400 mi	30
Weighted AVG Dist.	201 mi	100

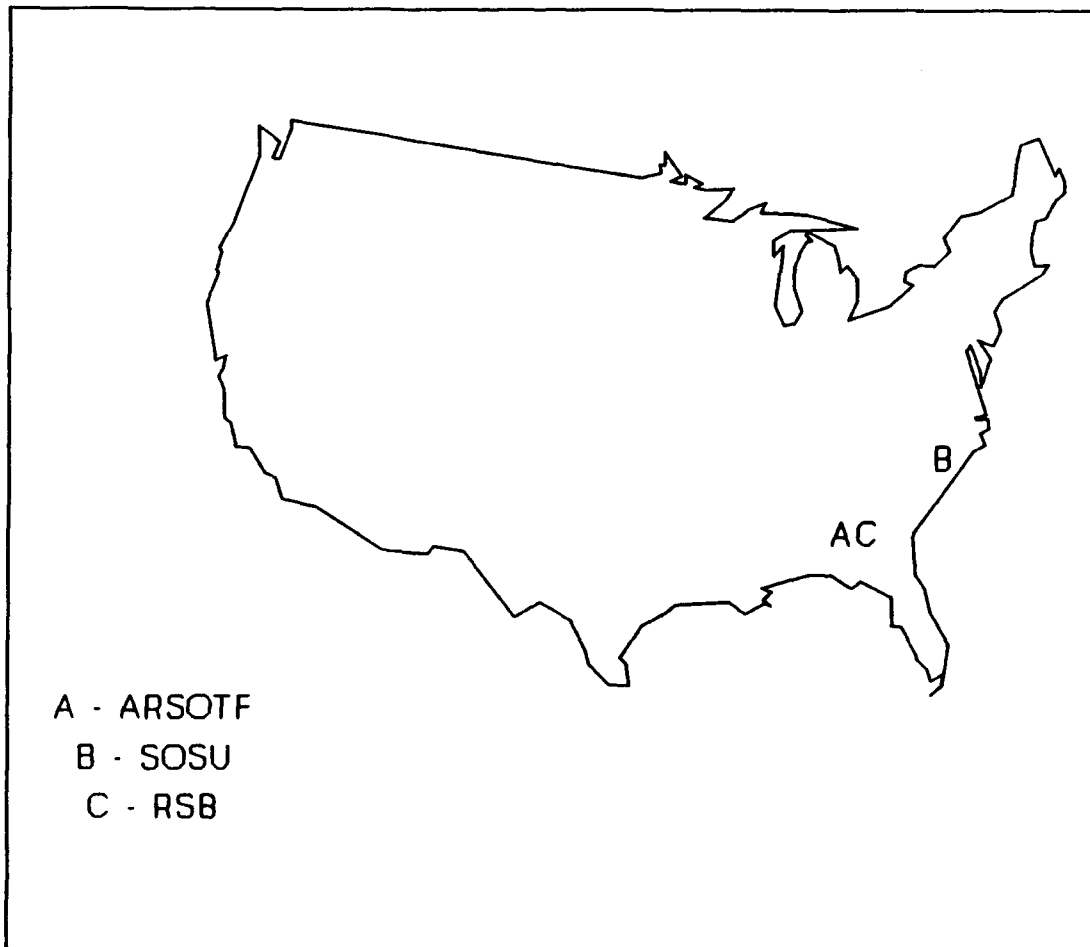


Figure 6-6 Alternative 2 Planning Node Locations

c. Alternative 3: SOSCOM Proposal, Deployed

The distance between the support planning nodes under alternative 3 are summarized in Table 6-11. The locations of each support planning node are shown in Figure 6-7.

TABLE 6-11

ALT 3 SEPARATION OF NODES

Planning Nodes	Separation	Volume of Comm. % per year
ARSOTF - SOSCOM	400 mi	100
Weighted AVG Dist.	400 mi	100

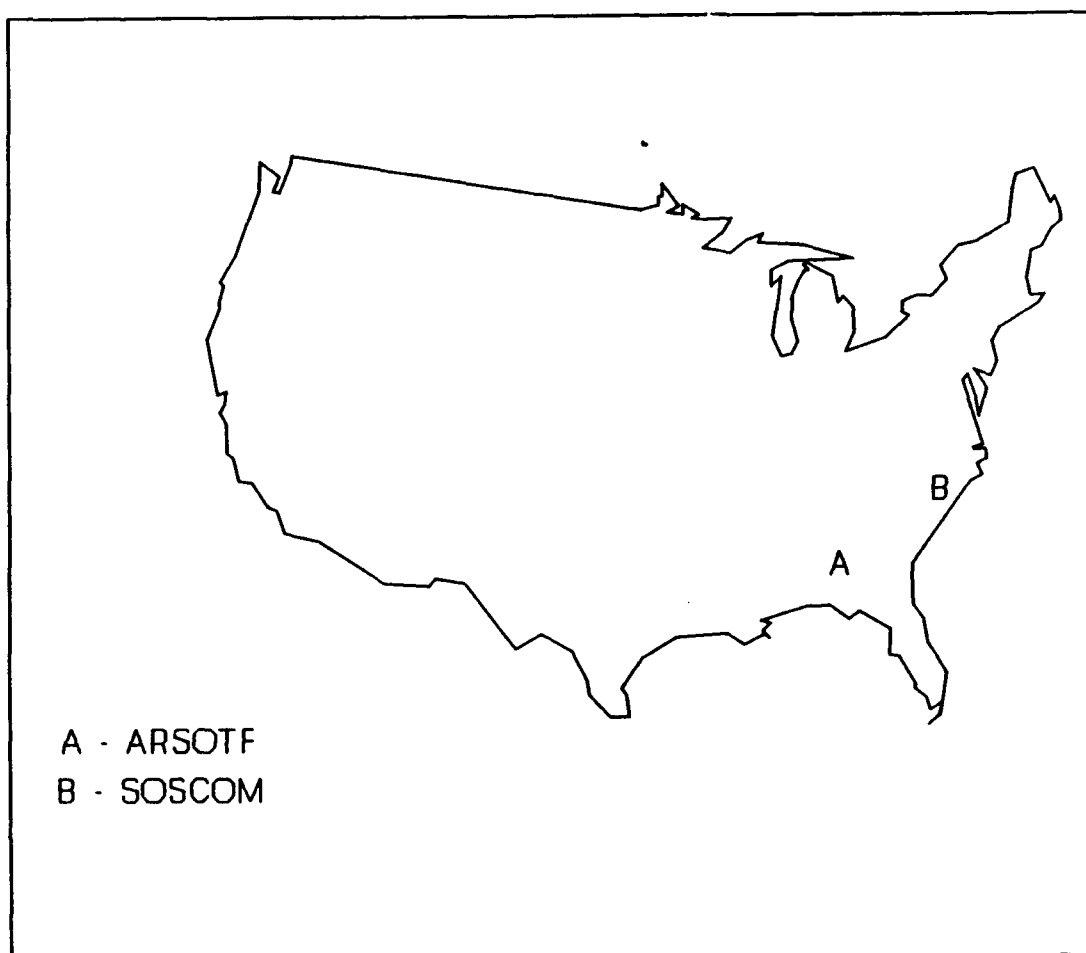


Figure 6-7 Alternative 3 Planning Node Locations

d. Alternative 4: 7th ID(L) DISCOM, Deployed

The distance between the two support planning nodes under alternative 4 are summarized in Table 6-12. The locations of each support planning node are shown in Figure 6-8.

TABLE 6-12

ALT 4 SEPARATION OF NODES

Planning Nodes	Separation	Volume of Comm. % per year
BDE TF - DISCOM	3 mi	100
Weighted AVG Dist.	3 mi	100

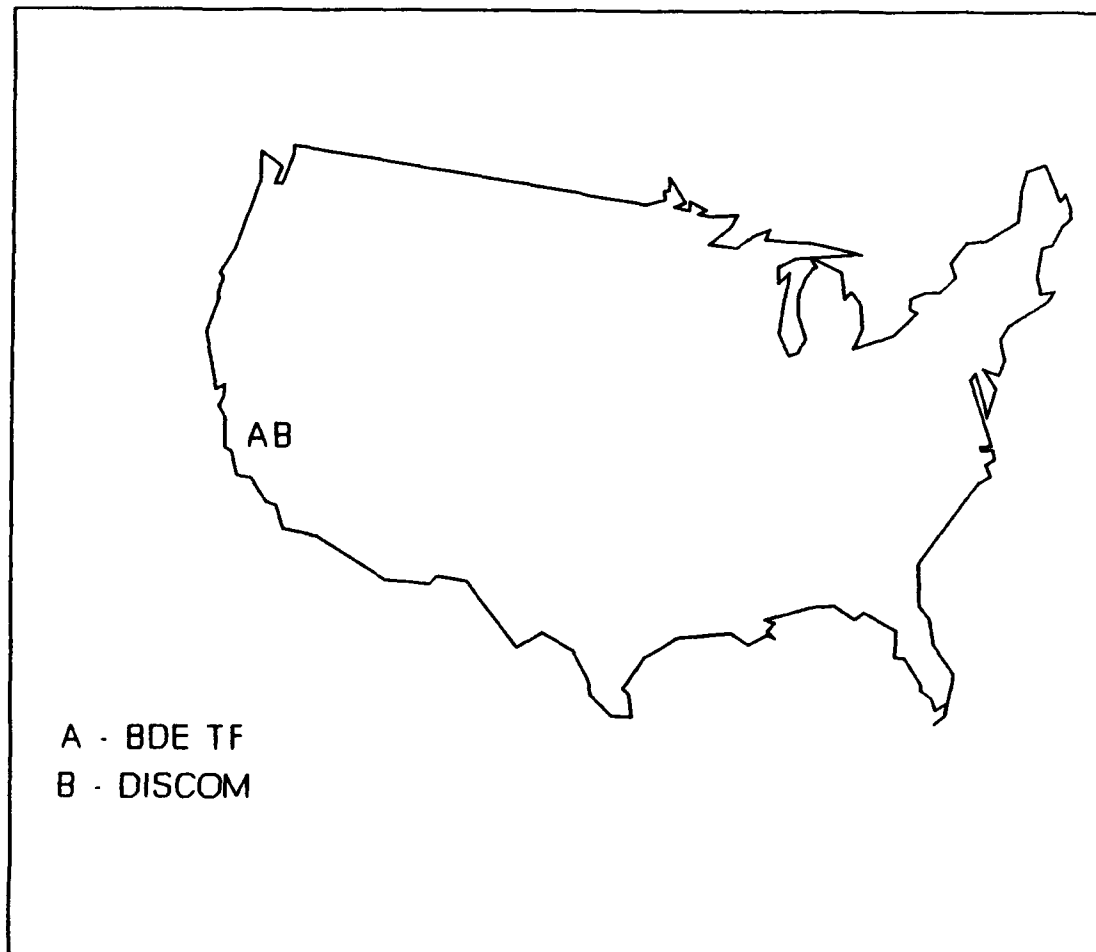


Figure 6-8 Alternative 4 Planning Node Locations

4. Number of Organic and Nonorganic Support Units

a. Alternative 1: Baseline ARSOTF, Deployed

The support command and control headquarters for the baseline ARSOTF for the April 1989 JRTC exercise was the 80th Ordnance Battalion. Table 6-13 shows the number of organic and nonorganic support units under the operational control of the 80th Ordnance Battalion for the exercise.

TABLE 6-13

ALT 1: BASELINE ARSOTF, DEPLOYED

80th ORD BN	
ORGANIC	NONORGANIC
Supply section Maintenance section Transportation platoon Mess section	Signal section Medical section Engineer section SOSB: supply section maintenance section trans section mess section
Total = 4	Total = 7

b. Alternative 2: SWC and USAIC Proposal, Deployed

The support command and control headquarters for the SWC and USAIC alternative, based on the hypothesized organization using the ARSOTF commander's guidance for the April 1989 JRTC exercise, is the Ranger Support Battalion (RSB). Table 6-14 shows the number of organic and nonorganic

support units which would be under the operational control of the RSB for the exercise.

TABLE 6-14

ALT 2: SWC AND USAIC PROPOSAL, DEPLOYED

Ranger Support Battalion	
<p>ORGANIC</p> <p>Supply section Maintenance section Transportation platoon Mess section Signal section Medical section Engineer section</p>	<p>NONORGANIC</p> <p>SOSB: supply section maintenance section trans section mess section</p>
Total = 7	Total = 4

c. Alternative 3: SOSCOM Proposal, Deployed

The support command and control headquarters for the SOSCOM alternative, based on the hypothesized organization using the ARSOTF commander's guidance for the April 1989 JRTC exercise and the SOSCOM concept discussed in Chapter V, is the TASC0 responsible for the theater in which the exercise occurs. Table 6-15 shows the number of organic and nonorganic support units which would be under the operational control of the TASC0 for the exercise.

TABLE 6-15

ALT 3: SOSCOM PROPOSAL, DEPLOYED

Theater Area Support Coordinator	
ORGANIC Supply section Maintenance section Transportation platoon Mess section Signal section Medical section Engineer section	NONORGANIC
Total = 7	Total = 0

d. Alternative 4: 7th ID(L) DISCOM, Deployed

The support command and control headquarters for the 7th ID(L) DISCOM alternative, based on the JRTC exercise in October 1990, is the FASCO responsible for supporting the deployed brigade task force. Table 6-16 shows the number of organic and nonorganic support units which would be under the operational control of the FASCO for the exercise.

TABLE 6-16

ALT 4: 7TH ID(L) DISCOM, DEPLOYED

Forward Area Support Coordinator	
<p>ORGANIC</p> <p>Supply section Maintenance section Transportation platoon Mess section Signal section Medical section</p>	<p>NONORGANIC</p> <p>Engineer Section</p>
Total = 6	Total = 1

5. Summary of Analysis

Table 6-17 provides a summary of the above comparative analysis based on the defined four measures of effectiveness of a command and control support structure.

TABLE 6-17

SUMMARY TABLE OF THE ARSOTF--7TH ID(L) SPT STRUCTURE

	MOEs for Support Command and Control			
Alternatives	(1)	(2)	(3)	(4)
ALT 1 CONUS	23:1	N/A	1063.1	N/A
ALT 1 Deployed	5.5:1	N=4/C=5	N/A	O=4/N=7
ALT 2 CONUS	10:1	N/A	201	N/A
ALT 2 Deployed	5.5:1	N=3/C=3	N/A	O=7/N=4
ALT 3 CONUS	10:1	N/A	400	N/A
ALT 3 Deployed	6:1	N=2/C=1	N/A	O=7/N=0
ALT 4 CONUS	10:1	N/A	3	N/A
ALT 4 Deployed	9:1	N=2/C=1	N/A	O=6/N=1
NOTES: (1) "Tooth-to-Tail" Ratio (2) # of CSS planning nodes (N)/Channels (C) (3) Proximity of CSS planning nodes (AVG miles) (4) # of Organic (O) and Nonorganic (N) SPT units				

VII. SUMMARY, CONCLUSION AND RECOMMENDATION

A. SUMMARY

The research in this thesis focuses on the internal sustainment of Army special operations forces (ARSOF). This thesis is written to assist decision makers and force developers in their effort to formulate an adequate Army special operations forces (ARSOF) support structure particularly when these forces are deployed in undeveloped theater areas outside the United States.

The problem examined in this thesis is whether the current ARSOF support command and control structure (Table 1-2), which is designed to support the baseline ARSOF and ARSOTF (Tables 1-1 and 1-3), is the best structure, in terms of both planning efficiency and suitability for the command and control of all ARSOF support assets. The purpose of the analysis was to determine if an alternative ARSOF support structure is more appropriate for the command and control of ARSOF support assets.

One of the objectives of this thesis was to compare three alternative ARSOF support command and control structures to each other and to the conventional infantry division (light) support command and control structure. A second objective of this thesis was to determine if the current ARSOF support command and control structure (Table 1-2)

requires realignment. The analysis was conducted with the use of four measures of effectiveness (MOEs) for a command and control support structure. The four MOEs used were: 1) "tooth-to-tail" ratio, 2) the number of support planning nodes/channels, 3) the proximity of the support planning nodes to each other, and 4) the number of organic and nonorganic support units.

The thesis focused on providing recommendations to the ARSOF force planners and developers in their formulation of a new ARSOF support structure. The research has been oriented toward answering the following questions:

- Is a special operations support command (SOSCOM) required to manage all SOF CSS units?
- What would be the appropriate mission and organization of such a SOSCOM unit?

B. CONCLUSION

The analysis conducted in Chapter VI was intended to help determine which of the three alternative ARSOF support structures is most comparable, in terms of planning efficiency, to the infantry division (light) support command (DISCOM) in supporting a contingency operation. The basis for comparing the three ARSOF alternatives to the DISCOM is the similarities in the ARSOF and infantry division (light) missions and the similarities in the size of the force requiring support.

The MOEs are ranked in the following order for the purpose of drawing conclusions from the four alternative support structures. The ranking is based on the importance of the MOE in terms of efficient planning communications channels.

- Number of support planning nodes/channels.
- Number of organic and nonorganic support units.
- Proximity of the support planning nodes.
- "Tooth-to-tail" ratio.

Table 7-1 summarizes the comparison results of the three alternative ARSOF support structures to the infantry division (light) DISCOM from Chapter VI. It shows Alternative 3, the Special Operations Support Command (SOSCOM), is the most comparable to the DISCOM with respect to the number of support planning nodes. In addition, Alternative 3, the SOSCOM proposal, is also comparable to the DISCOM with respect to the number of organic and nonorganic support units and with respect to the "tooth-to-tail" ratio. Finally, the table shows that Alternative 2, the SWC and USAIC proposal, is the most comparable to the DISCOM with respect to the proximity of the support planning nodes to each other.

TABLE 7-1
COMPARISON SUMMARY

MOE	ALT 1 BASELINE	ALT 2 SWC & USAIC	ALT 3 SOSCOM	ALT 4 DISCOM
(1)	N=4/C=5	N=3/C=3	N=2/C=1	N=2/C=1
(2)	O=4/N=7	O=7/N=4	O=7/N=0	O=6/N=1
(3)	1063.1	201	400	3
(4)	5.5:1	5.5:1	6:1	9:1
NOTES: (1) # of CSS planning nodes (N)/Channels (C) (2) # of Organic (O) and Nonorganic (N) SPT units (3) Proximity of CSS planning nodes (AVG miles) (4) "Tooth-to-Tail" Ratio				

The conclusion reached by the results stated above is that the Special Operations Support Command proposal, alternative 3, is the most comparable to the DISCOM, based on the defined MOEs. Consequently, the results indicate that a Special Operations Support Command is similar to the DISCOM, and may offer more efficient planning channels than alternatives 1 and 2. The appropriate mission and organization of the SOSCOM is as described under alternative 3 in Chapter V.

C. RECOMMENDATION

1. Creation of a Special Operations Support Command (SOSCOM)

Recommend that the U.S. Army John F. Kennedy Special Operations Warfare Center and School initiate a collective

feasibility study with the U.S. Army Logistics Center and the U.S. Army Infantry Center for the creation of a Special Operations Support Command (SOSCOM) to provide command and control for all active ARSOF combat support and combat service support units. The study would focus on the cost and operational effectiveness of ARSOF sustainment in creating a centralized ARSOF support units headquarters. The proposed SOSCOM organizational structure and concept, described in Chapter V, are offered as a departure point for the study.

LIST OF REFERENCES

1. Michael T. Klare and Peter Kornbluh, eds., Low Intensity Warfare; Counterinsurgency, Proinsurgency, and Antiterrorism in the Eighties, New York: Pantheon Books, 1988.
2. Headquarters, Department of the Army, Field Manual 100-25, Special Operations Forces, p. 14-2, U.S. Government Printing Office, Washington, D.C.
3. U.S. Army John F. Kennedy Special Warfare Center and School, "Assessment Report (AR) for the Theater Army Special Operations Command (TASOC)," 10 August 1989.
4. U.S. Army John F. Kennedy Special Warfare Center and School, "Army Special Operations Forces Combat Service Support Review Information Briefing," October 1990.
5. U.S. Army Infantry Center, "Ranger Force Operational and Organizational Concept Study," November 1989.
6. Stiner, Carl W., "Prime-time Players in the Third World Network of Conflict," Army, 1990-91 Green Book, p. 191, October 1990.
7. Harper, Gilbert S., "Logistics: A Special Operations Mission-Stopper," Army Logistician, p. 8, November-December 1989.
8. Harper, Gilbert S., "Logistics in Grenada: Supporting No-Plan Wars," Parameters, June 1990.
9. United States Army Logistics Center, "Operational Concept for Combat Service Support to Special Operations Forces" (1st Draft).
10. Lieutenant Colonel John M. Oseth, "Intelligence and Low-Intensity Conflict," Naval War College Review, p. 19, November-December 1984.
11. Logistics Management Institute, Report SO801R1, The Next Step for Special Operations: Getting the Resources to Do the Job, Giles, James E. III, and others, August 1988.

12. Quoted by Colonel James B. Motley, USA (Ret.), "Washington's Big Tug-of-War Over Special Operations Forces," Army, p. 24, November 1986.
13. Ryan, Paul B., The Iranian Rescue Mission; Why it Failed, p. 144, Naval Institute Press, Annapolis, Maryland, 1985.
14. Spaulding and Crane, "Logistics for Army Special Operations Forces," Army Logistician, p. 13, July-August 1989.
15. Headquarters, Department of the Army, Field Manual 41-10, Civil Affairs Operations, p. 1-2, U.S. Government Printing Office, Washington, D.C., 1985.
16. 96th Civil Affairs S4 Command Briefing Charts, October 18, 1990.
17. Headquarters, Department of the Army, Field Manual 7-85, Ranger Unit Operations, p. 1-1, U.S. Government Printing Office, Washington, D.C., June 1987.
18. 528th Special Operations Support Battalion Command Briefing Charts, November 1990.
19. Interview between Captain Mike Lynch, Support/Plans Officer, 707th Maintenance Battalion, 7th Infantry Division Support Command, and the author, 14 December 1990.
20. Based on the personal experiences of the author during two exercises at the JRTC as the logistics plans officer for the 75th Ranger Regiment.
21. Telephone conversation between CW4 Craft, 1st U.S. Special Forces Command, Fort Bragg, NC, and the author, 13 December 1990.

INITIAL DISTRIBUTION LIST

	No. Copies
1. Defense Technical Information Center Cameron Station Alexandria, Virginia 22304-6145	2
2. Library, Code 52 Naval Postgraduate School Monterey, California 93940-5002	2
3. Professor Thomas P. Moore, Code AS/Mr Department of Administrative Sciences Naval Postgraduate School Monterey, California 93940-5000	1
4. Commander U.S. Army John F. Kennedy Special Warfare Center ATTN: ATSU-CD (Ms. Howe) Fort Bragg, North Carolina 38207-5000	1
5. Commander U.S. Army Infantry Center and School ATTN: Concepts and Doctrine (Mr. Chris Kearns) Fort Benning, Georgia 31905-5000	1
6. Commander U.S. Army Logistics Center ATTN: ATCL-CD (Major Johnstone) Fort Lee, Virginia 23801	1
7. Director TRAC-MTRY ATTN: Major Sturm P.O. Box 8692 Naval Postgraduate School Monterey, California, 93943-5000	1
8. Commander U.S. Army Combined Arms Support Command ATTN: ATCL-OPF (Captain Stauffer) Fort Lee, Virginia 23801-6000	1

9. Defense Logistics Studies Information
Exchange
United States Army Logistics Management
Center
Ft. Lee, Virginia 23801

1